

DOCUMENT DATA FORM

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Drawing book 7 Chapter 7: Floor trusses

Include work order no. and floor no. if applicable

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KEYWORDS - HIGHLIGHT ALL THAT APPLY

Level 1			
Bankers Trust	Project 4	WTC 1 - North Tower	Add
Below Grade	Project 5	WTC 2 - South Tower	
Concourse	Project 6	WTC 3 - Marriott Hotel	
Electrical Substation	Project 7	WTC 4 - South Plaza Bldg.	
Liberty Plaza	Project 8	WTC 5 - North Plaza Bldg	
PATH Station	WFC 1 - Oppenheimer Dow	WTC 6 - Customs House	
PATH Terminal	WFC 2 - Tower B	WTC 7	
Project 1	WFC 3 - American Express	WTC Complex	
Project 2	WFC 4 - Tower D	WTC Plaza	
Project 3			

Level 2			
Accident analysis & risk	Fire protection	Misc. Performance Problems	Structural
Architectural	Fire service	News coverage	Tenant alterations
Data request	Landscaping	Police	Tenant Space
Emergency management	Management	Security	Add
Evacuation	Mech./elec.		

Level 3				
1993 explosion	Cranes	Frame	Roof	Weight
A/E fitout	Criteria	Frame analysis	Safety	Weld detail
A-242	Dampers	Frequency	Schedule	Weld size
A-36	Debris	Fuel	Sculpture	Welding
A-497	Deck	Furniture layout	Security system	Wind
Aircraft impact	Deflection	Generators	Shear knuckle	Windows
Air cooled condensers	Demolition	Guidelines	Shear test	Yield strength
Analysis	Design	Gypsum board	Shear Stud	Add
Angles	Detailing	Hat truss	Shop drawings	Drawing books
Antenna	Doors	Human comfort	Shortening	
Artifacts	Drawings	HVAC	Slab	
Asbestos	Eastern States Steel	Index	Slurry wall	
Base plate	Egress	Inspection	Smoke control	
Beams	Elevator	Insulation	Smoke test	
Bid documents	Elevator Shaft	Job number	Spandrel beam	
Bid Invitation	Emergency	Joist	Specifications	
Bow tie	communications	L-50	Splices	
Bracing	Equipment	Lighting	Sprinkler	
Bridging truss	Erection marks	Loads	Stability	
Building code	Errors & Omissions	Maintenance	Stairways	
Calculations	Escalator	Marking	Standards	
Carpet	Expansion joint	Mesh reinforcement	Steel	
Ceilings	Exterior columns	Mill inspection	Steel composition	
Certification	Fabrication	Model	Stiffness	
Chillers	Family member	Mullion	Structural review	
Cladding	Field survey	Operations	Surveillance	
Collapse	Fire alarms	Paint	Survey	
Columns	Fireproofing	Partition layout	Survivor	
Communication systems	Fire spread	Partitions	Tenant list	
Composite truss	Fire testing	Photos	Tenant occupancy	
Computer output	Firetower	Pipes	Testing	
Computer program	Flag Pole	Plumbing	Tie	
Concrete	Flammability	Prestressing	Tolerances	
Connections	Floor	Probability, uncertainty	Transfer Girders	
Construction	Floor load	Quality control	Triad	
Contract	Floor slab	Ramp	Truss	
Core beams	Floor system	Reinforcing	Vestibule	
Core columns	Floor trusses	(strengthening)	Vibration	
Corrosion	Formwork	Renovation	Walls	
Cracking	Foundations	Repair	Water supply	
	Fracture	Research & Development	Weather	

WTCI-1061-LERA

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

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PROJECT THE WORLD TRADE CENTER TITLE FLOOR TRUSSES - INDEX & GENERAL NOTES DATE 1-17-69

REVISIONS

2-3-69

3-3-69

3-19-69

4-1-69

4-21-69

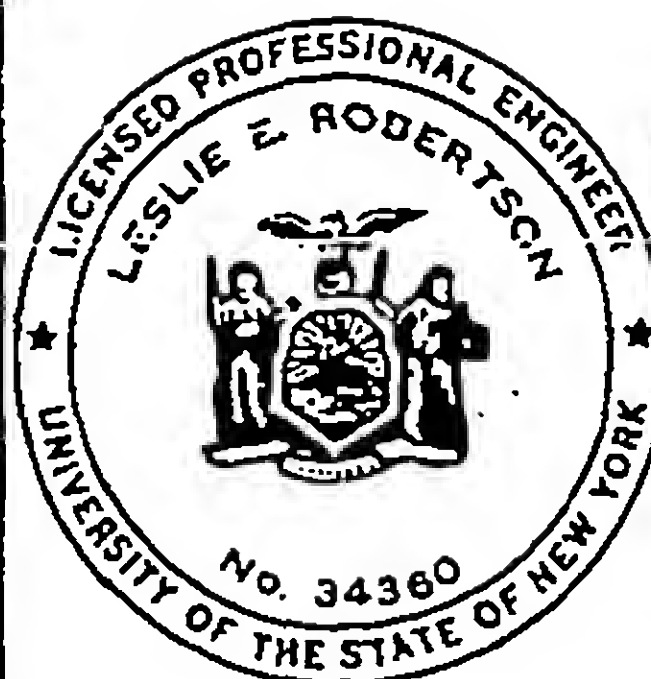
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GENERAL NOTES

1. All material, including detail material to be $F_y = 50$ except as noted. $1\frac{1}{2}$ " x $5/8$ " Straps (Detail 12), 15" & 18" channels (Detail 13) and deck support angles (Detail 12 & 16) to be $F_y = 36$.
2. All welding shall be accomplished using E70xx low hydrogen electrodes or other equivalent, approved welding process. Field welding shall be performed under Contract WTC-230.00.
3. All bolted connections shall be friction type connections. All bolts shall be ASTM A325 bolts except where ASTM A490 bolts are specifically called for in the drawings. Washer shall be used under both bolt head and nut at all locations with oversize or elongated holes, in accordance with the requirement of FB1, FB2 & FB3. Bolts and washers will be supplied under Contract WTC-234.00 and installed under Contract WTC-230.00.
4. All floor truss angles have long legs back to back or vertical unless noted (SV) in the drawings, in which case, short legs shall be back to back or vertical.
5. Forces in truss members are indicated thus in the drawings:
Compression (-)
Tension (+)
6. All 29T trusses shall be cambered to a parabolic camber. Camber diagrams 7-B7-26 indicates required camber at mid span.
7. Truss details are shown in 7-B8. See index 7-B8-1.
8. See SB-18, SB-19, SB-20 & SB-21 for location of trusses. See SB-18, SB-19, SB-20, SB-21 and this chapter of Drawing Book 7 (7-B7) for location of Details.
9. See SB-184, SB-185, SB-186 & SB-187 for Steel Deck Plans and Shear stud location and number. Steel deck shall be furnished under Contract WTC-222.00 and installed under Contract WTC-230.00. Shear studs shall be furnished and installed under Contract WTC-230.00.
10. Seats for trusses at core perimeter are shown in Drawing Book 6 and furnished under Contract WTC-226.00. Seats for trusses at the exterior wall are shown in Drawing Book 4 and furnished under Contract WTC-214.00.
11. Work lines for diagonal and vertical web members shall be the applicable X or Y dimension shown in the AISC Manual, Sixth Edition, rounded to the nearest $1/16$ inch, except that where a specific work line is dimensioned in the Drawings, the dimensioned work line shall be used.

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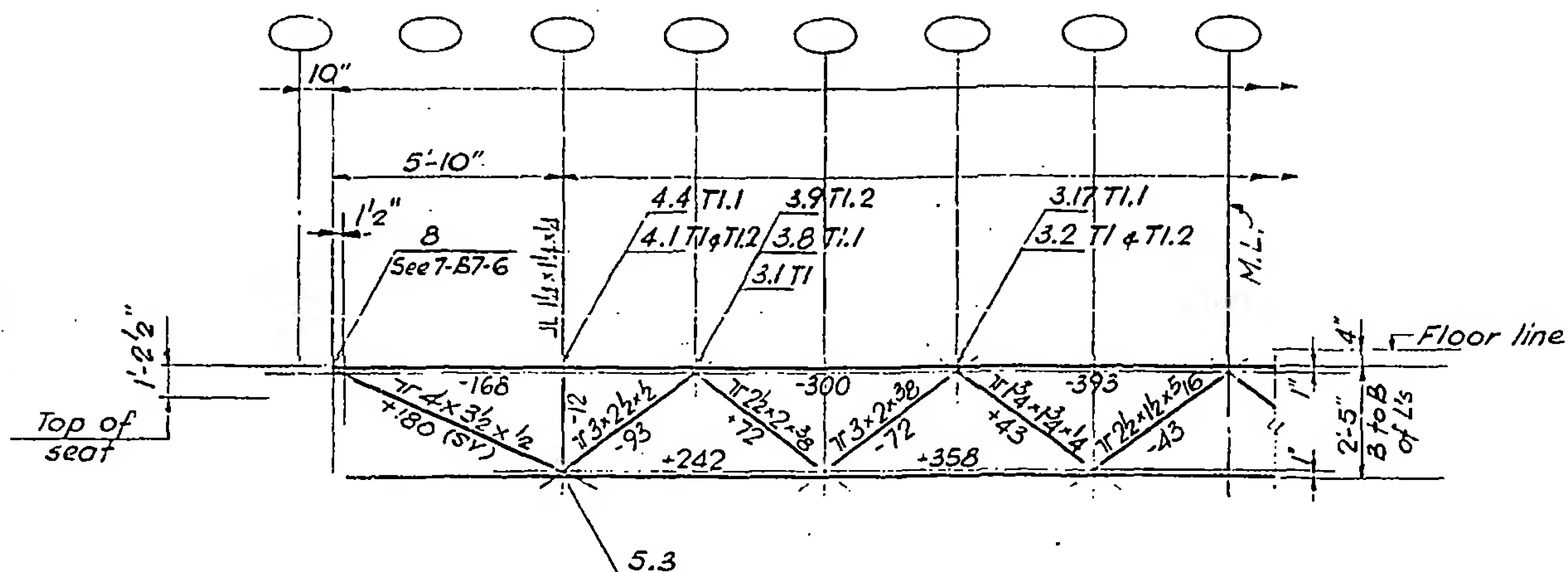
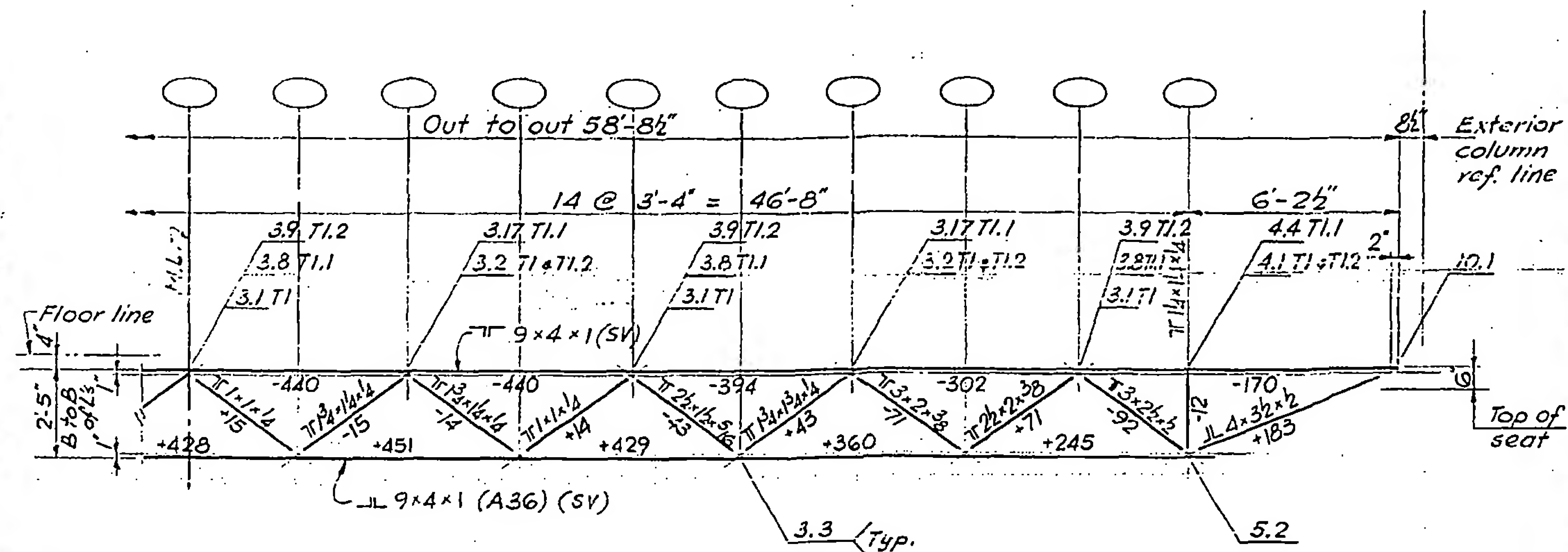
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PROJECT THE WORLD TRADE CENTER

TITLE FLOOR TRUSS 29T1, 29T1.1, 29T1.2

DATE 3-19-69

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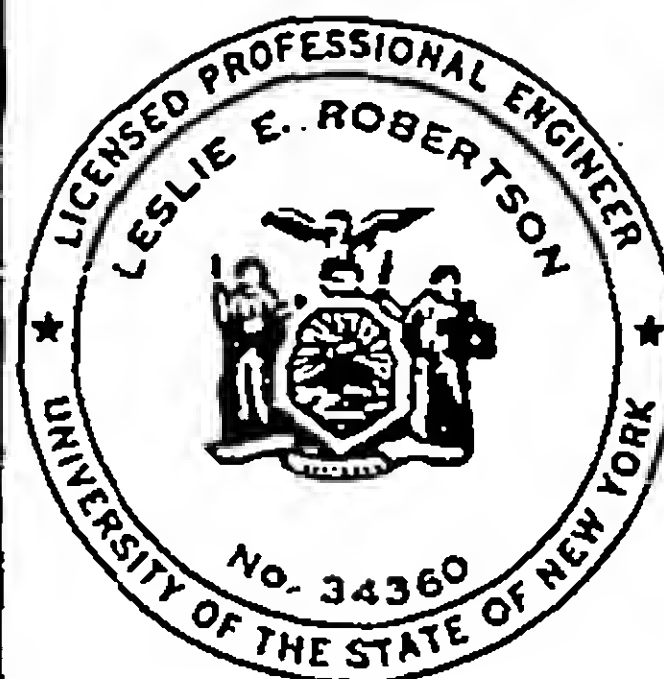
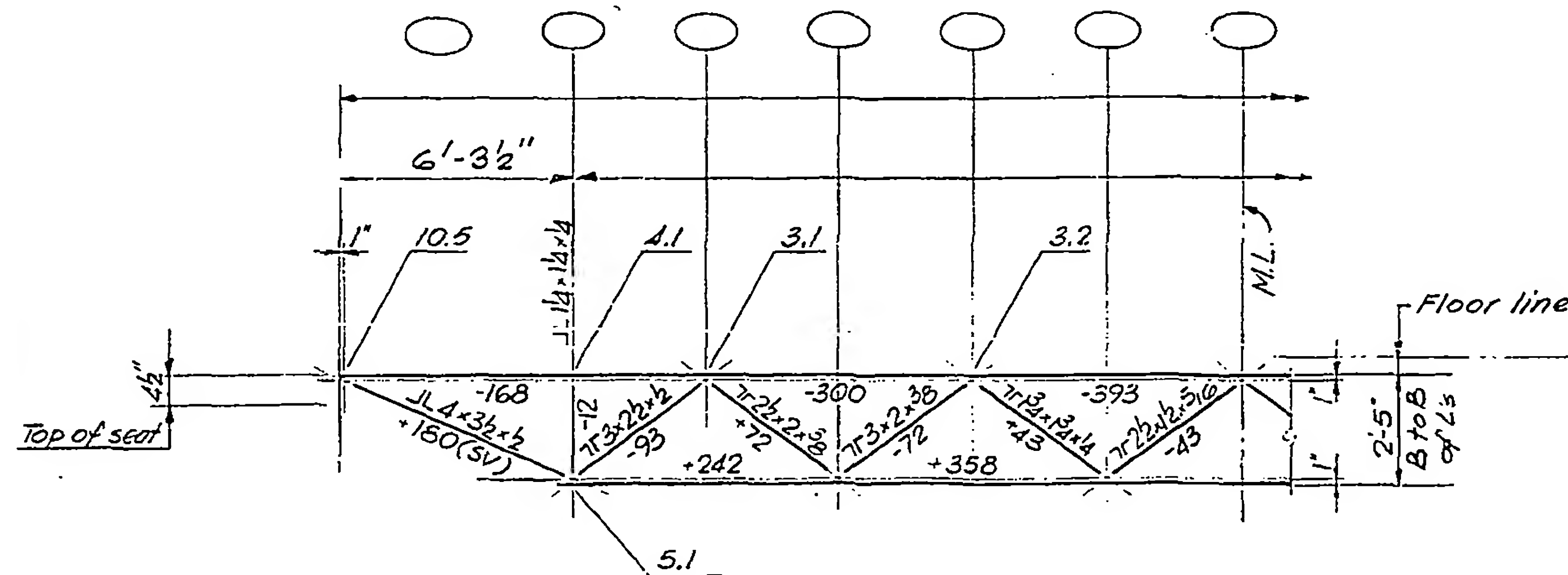
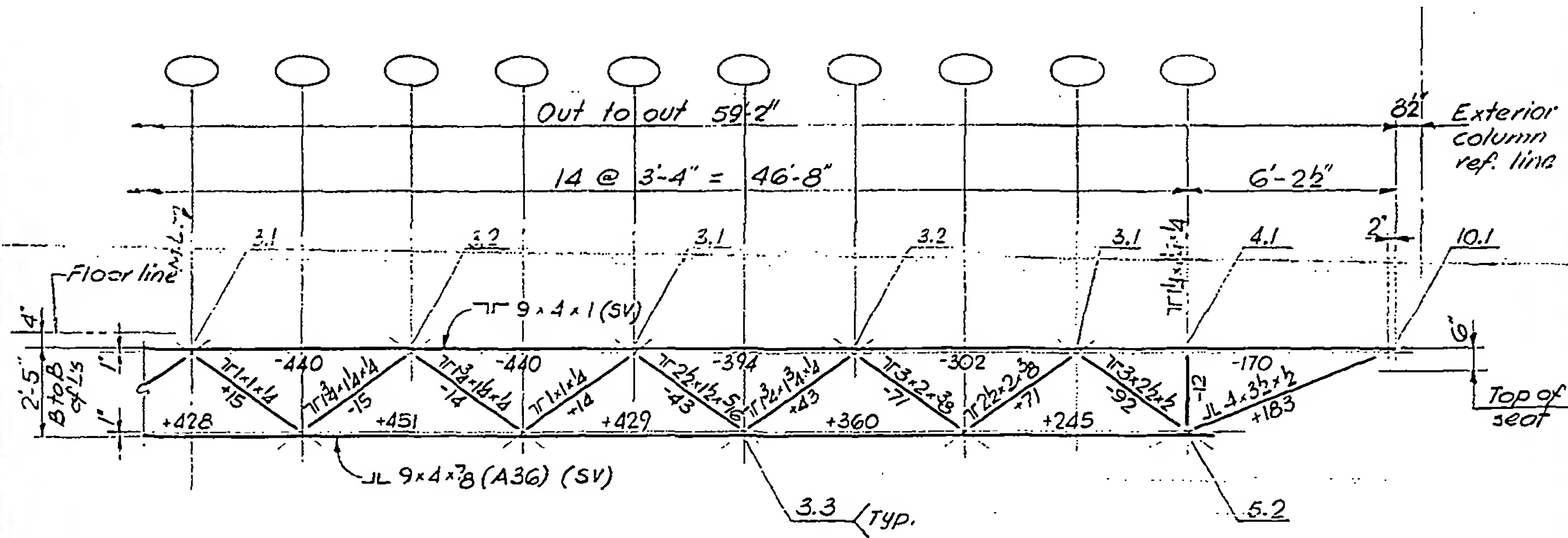
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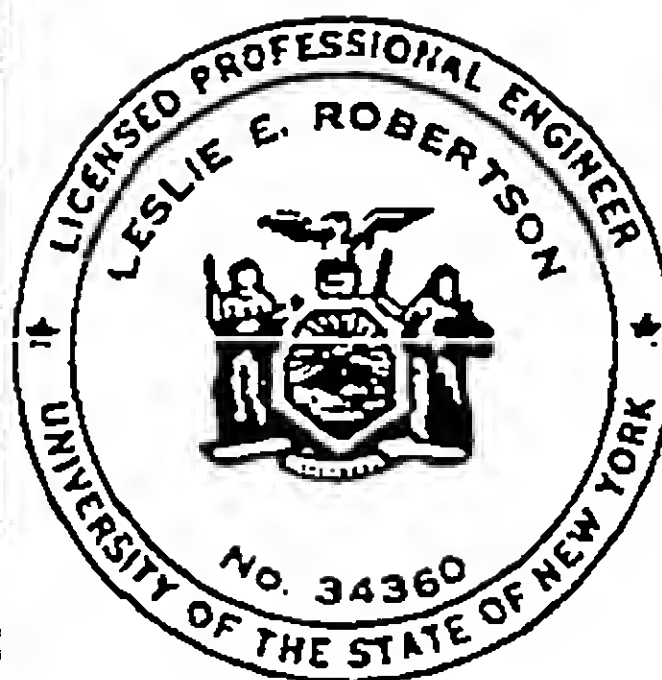
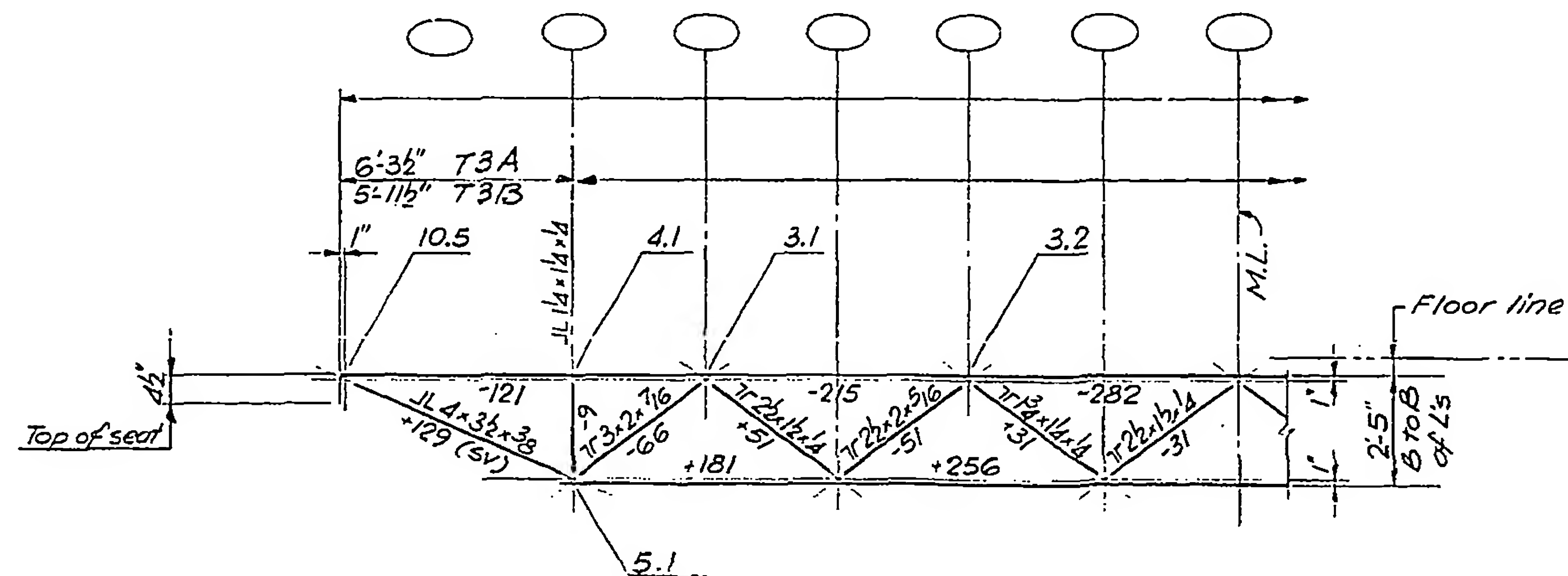
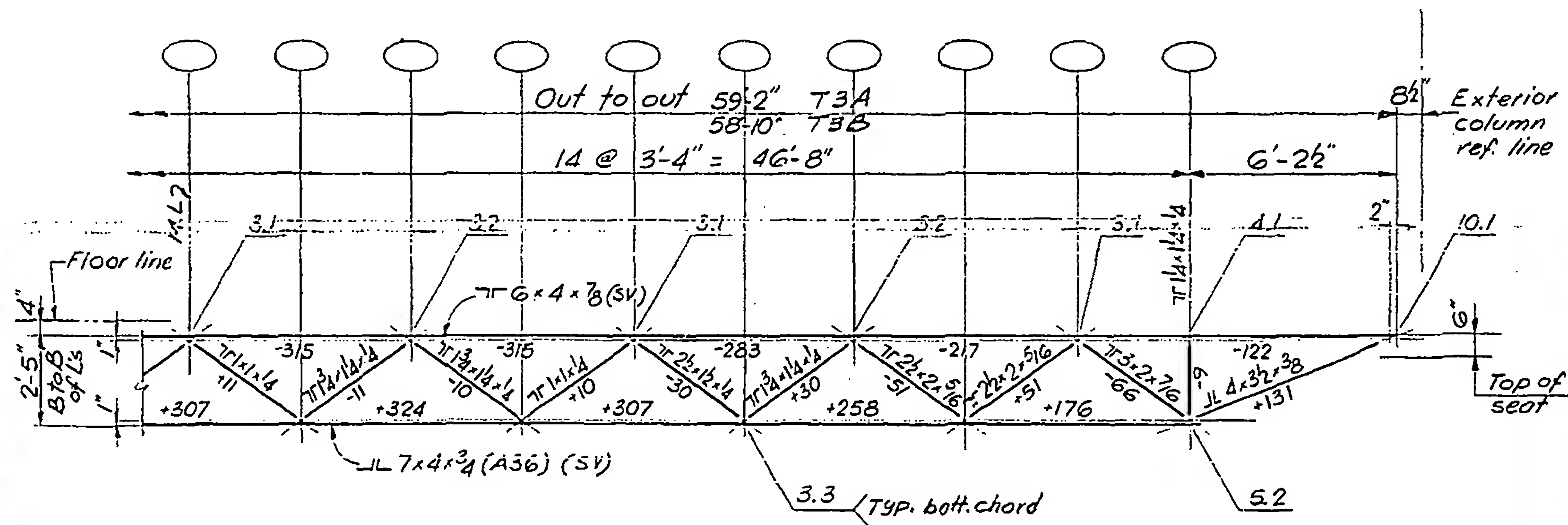
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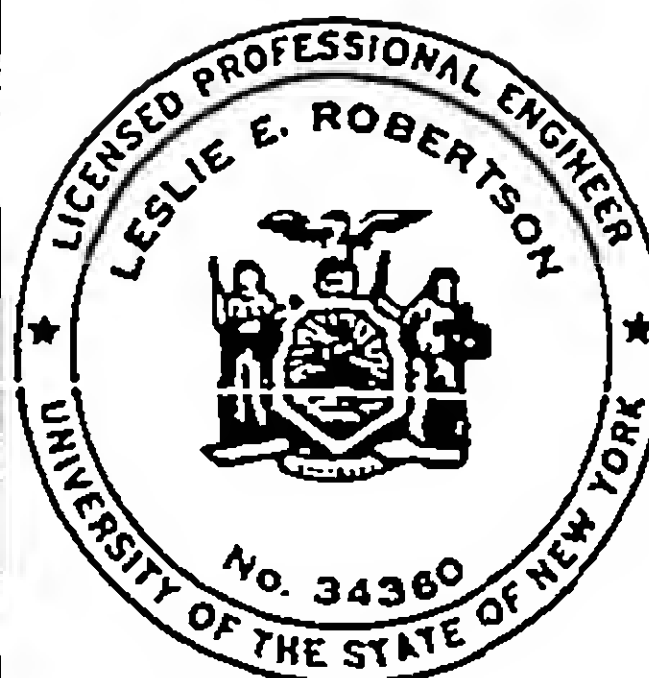
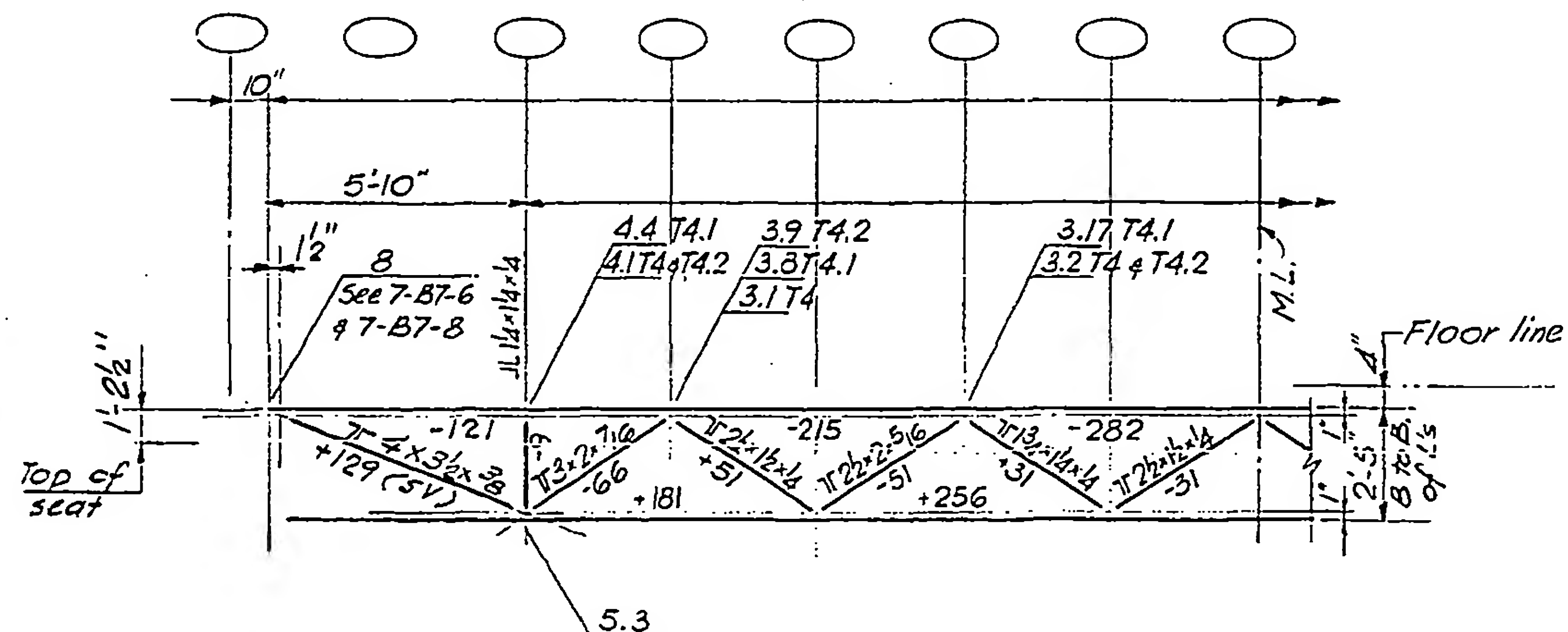
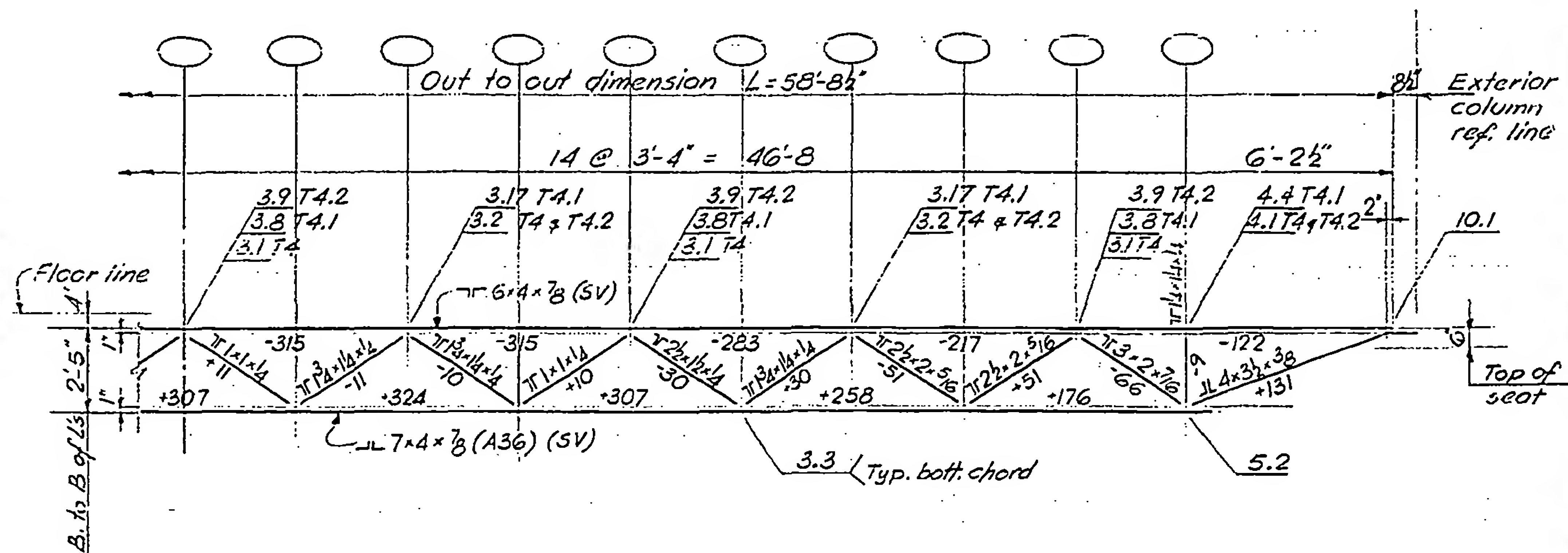
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TITLE	FLOOR TRUSS 29T4, 29T4.1, 29T4.2
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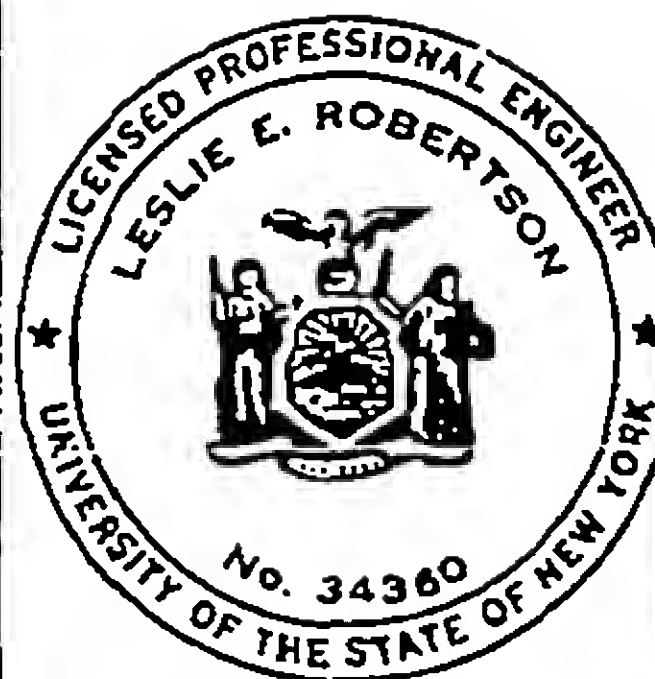
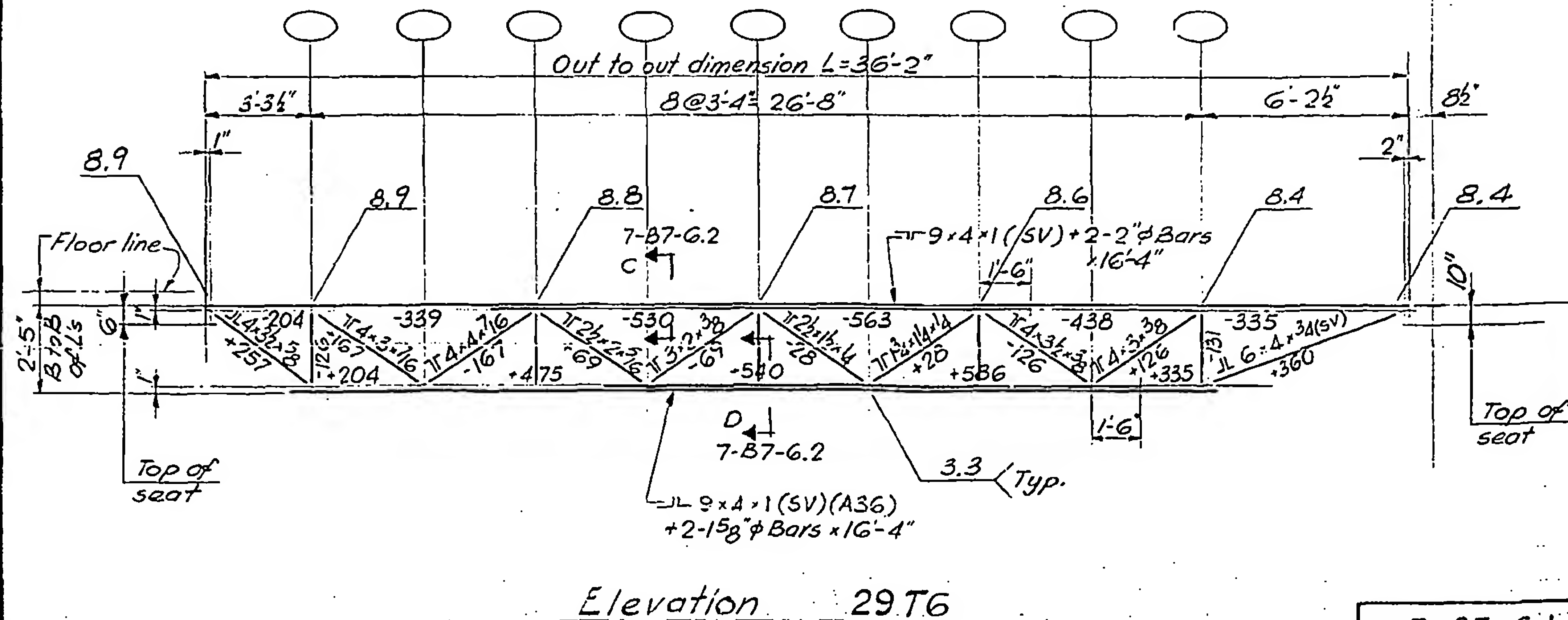
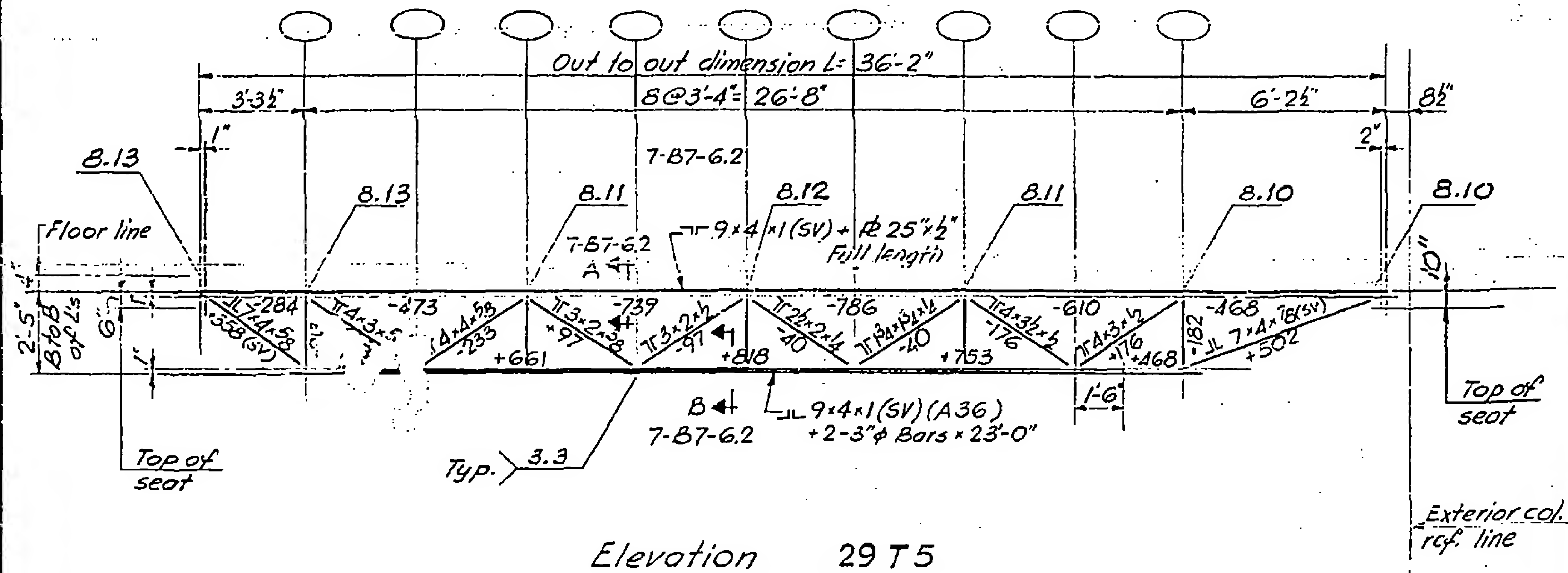
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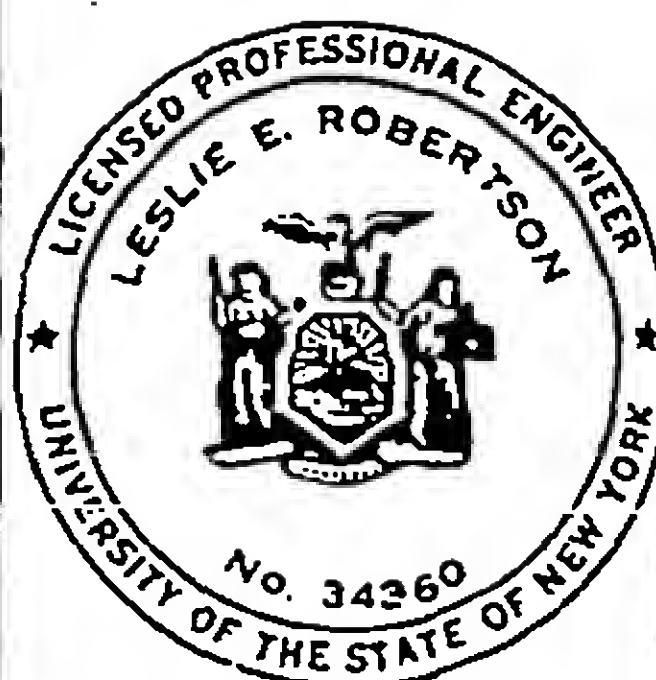
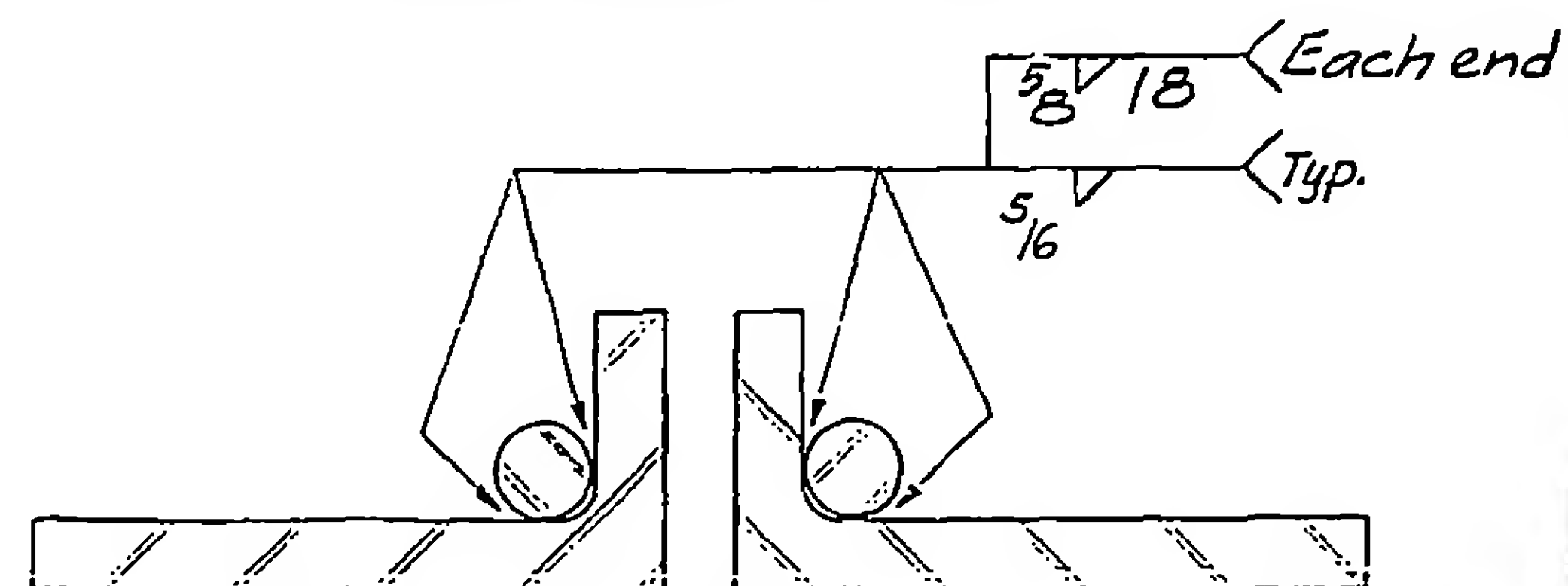
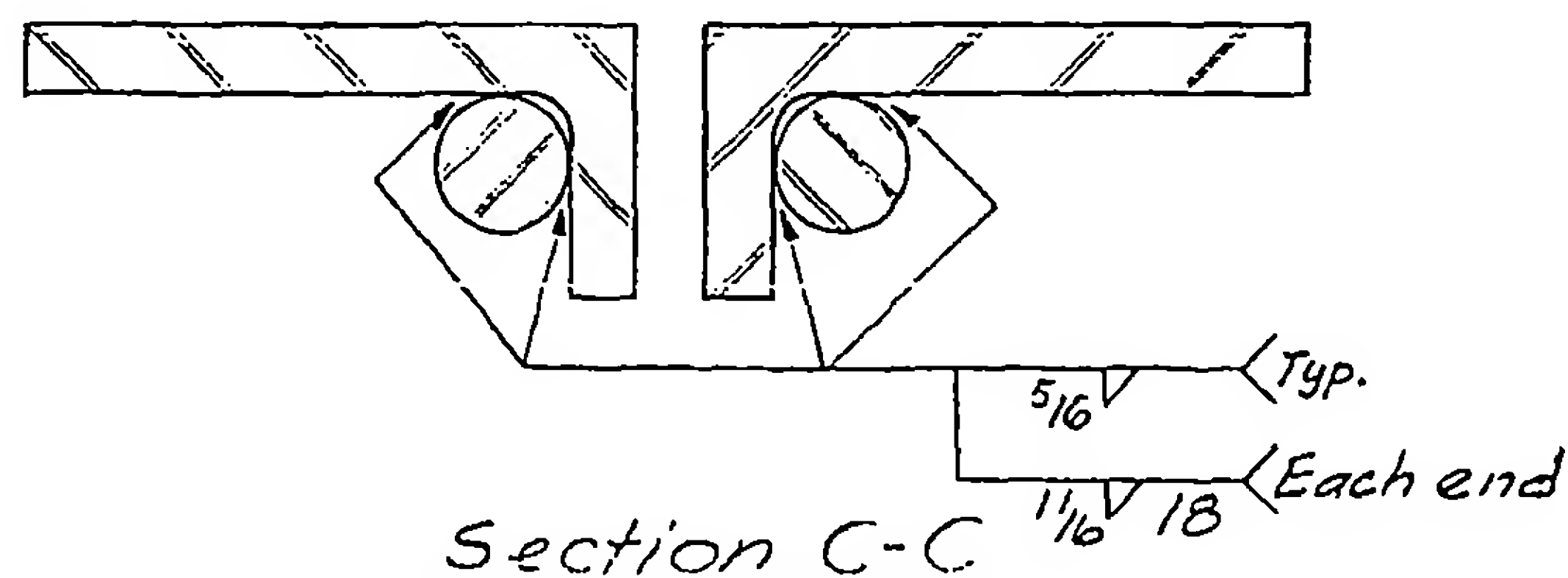
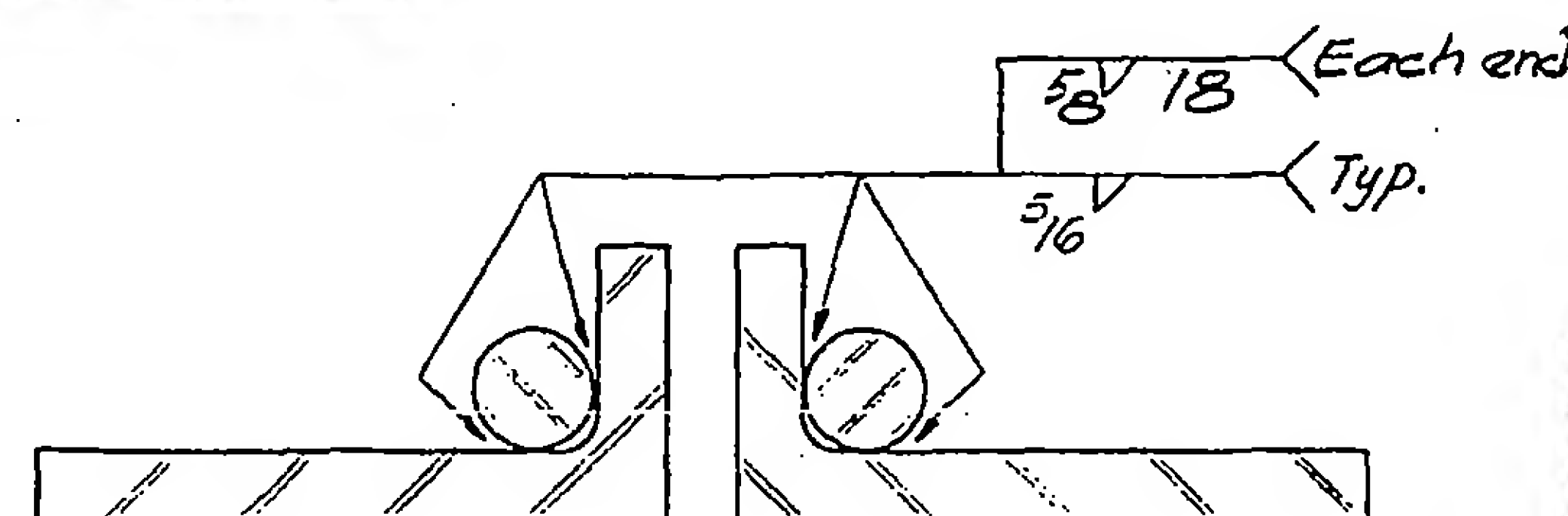
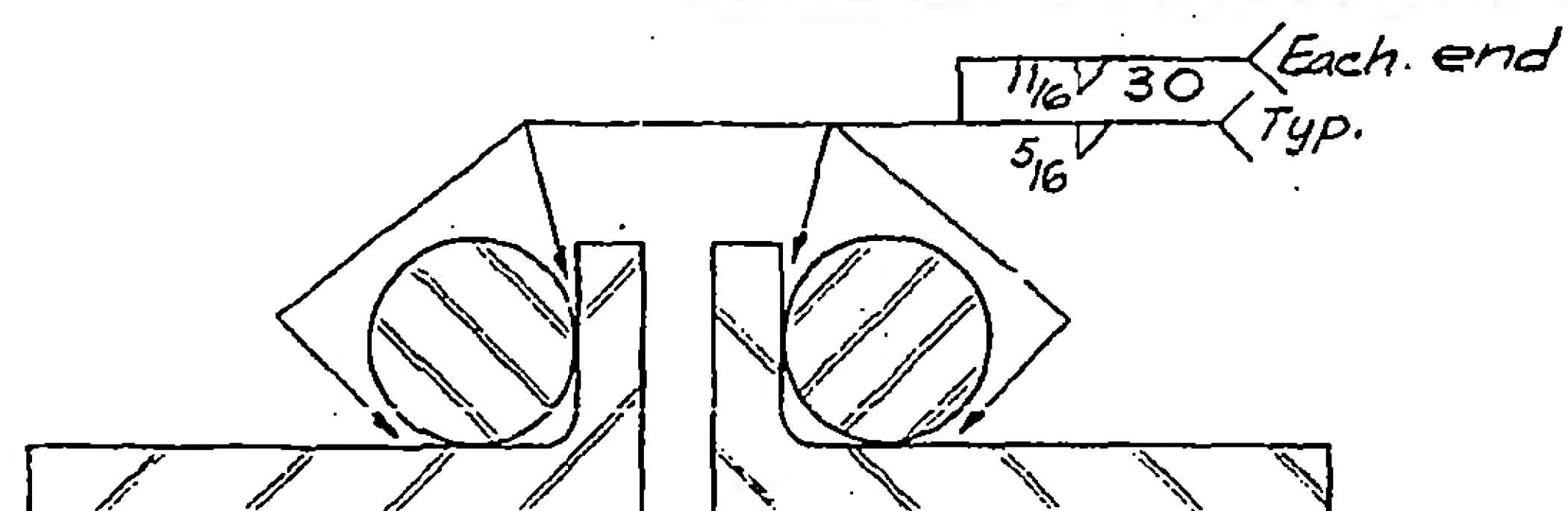
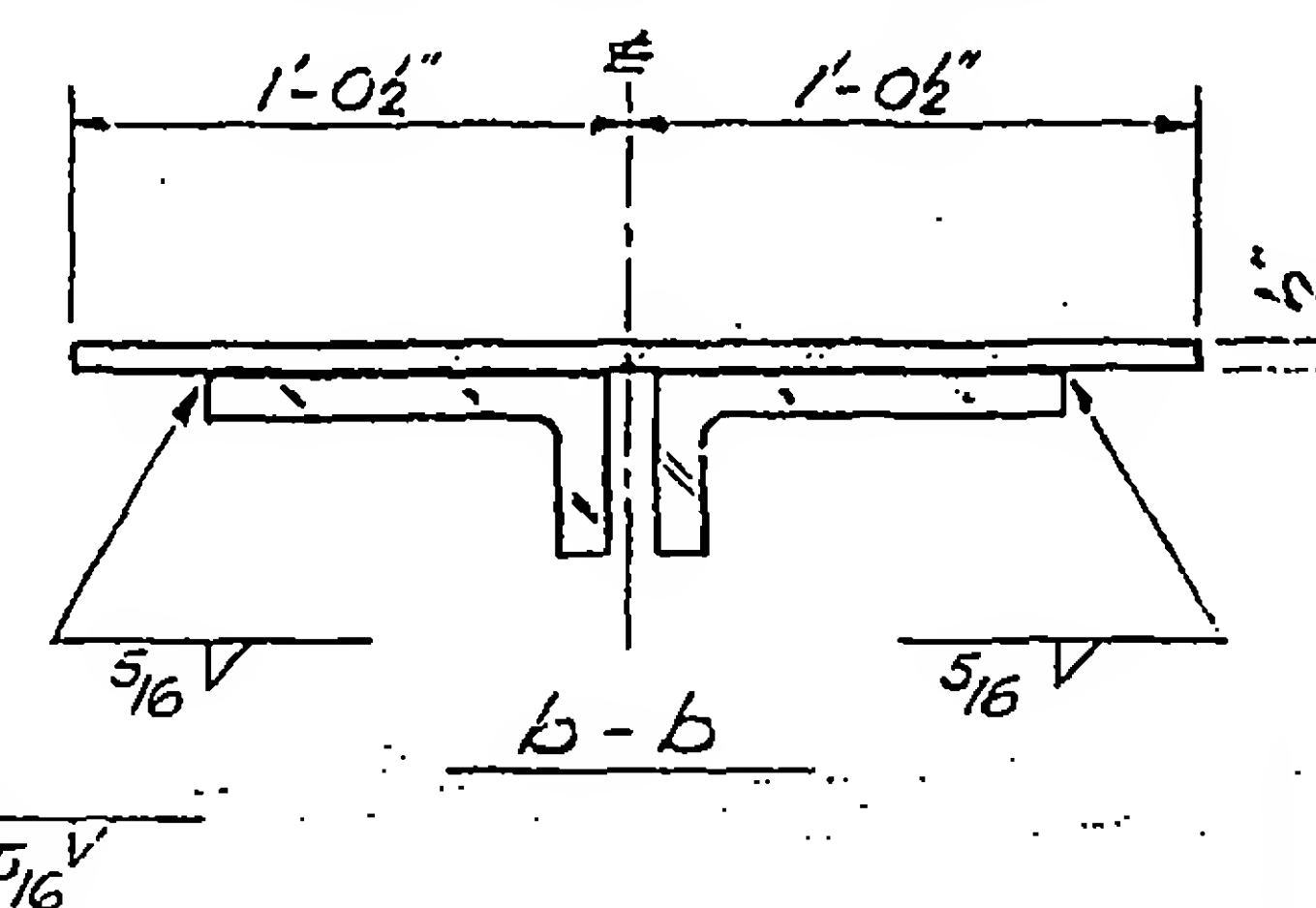
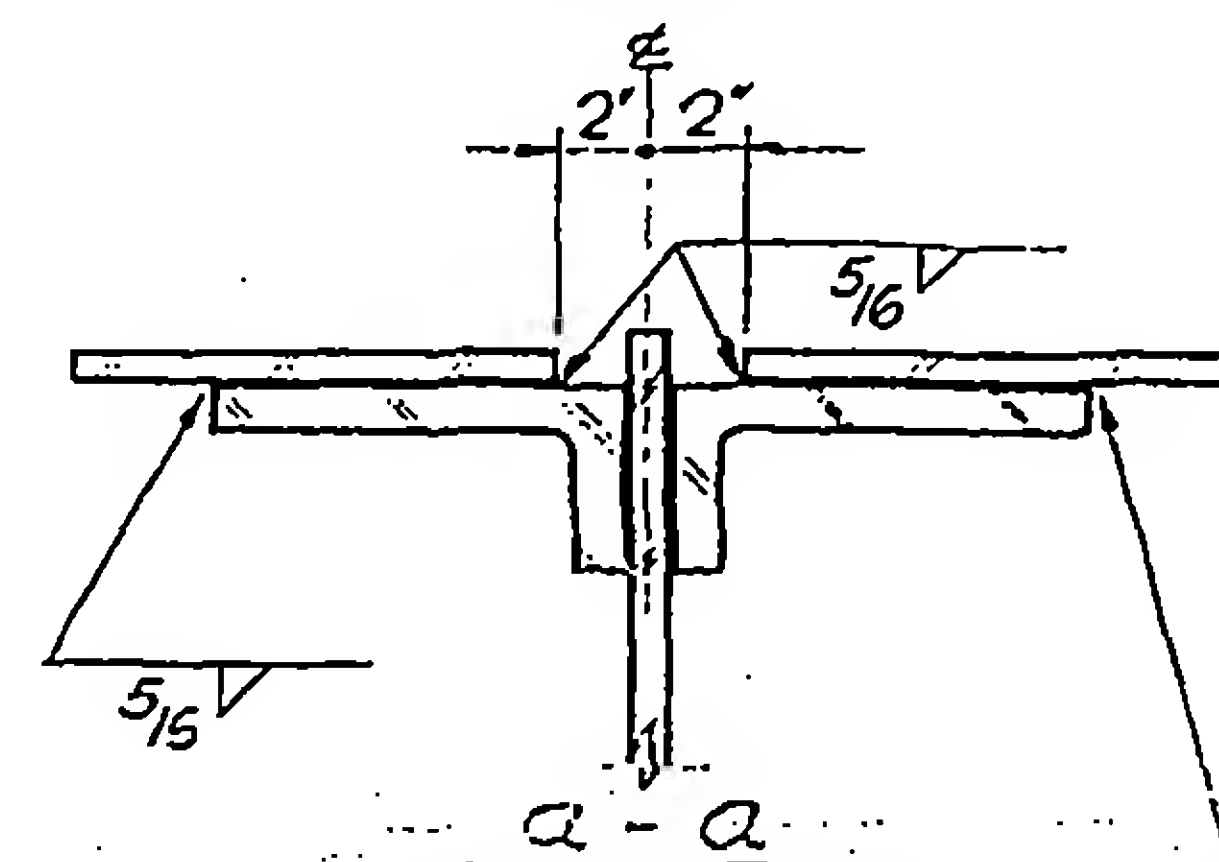
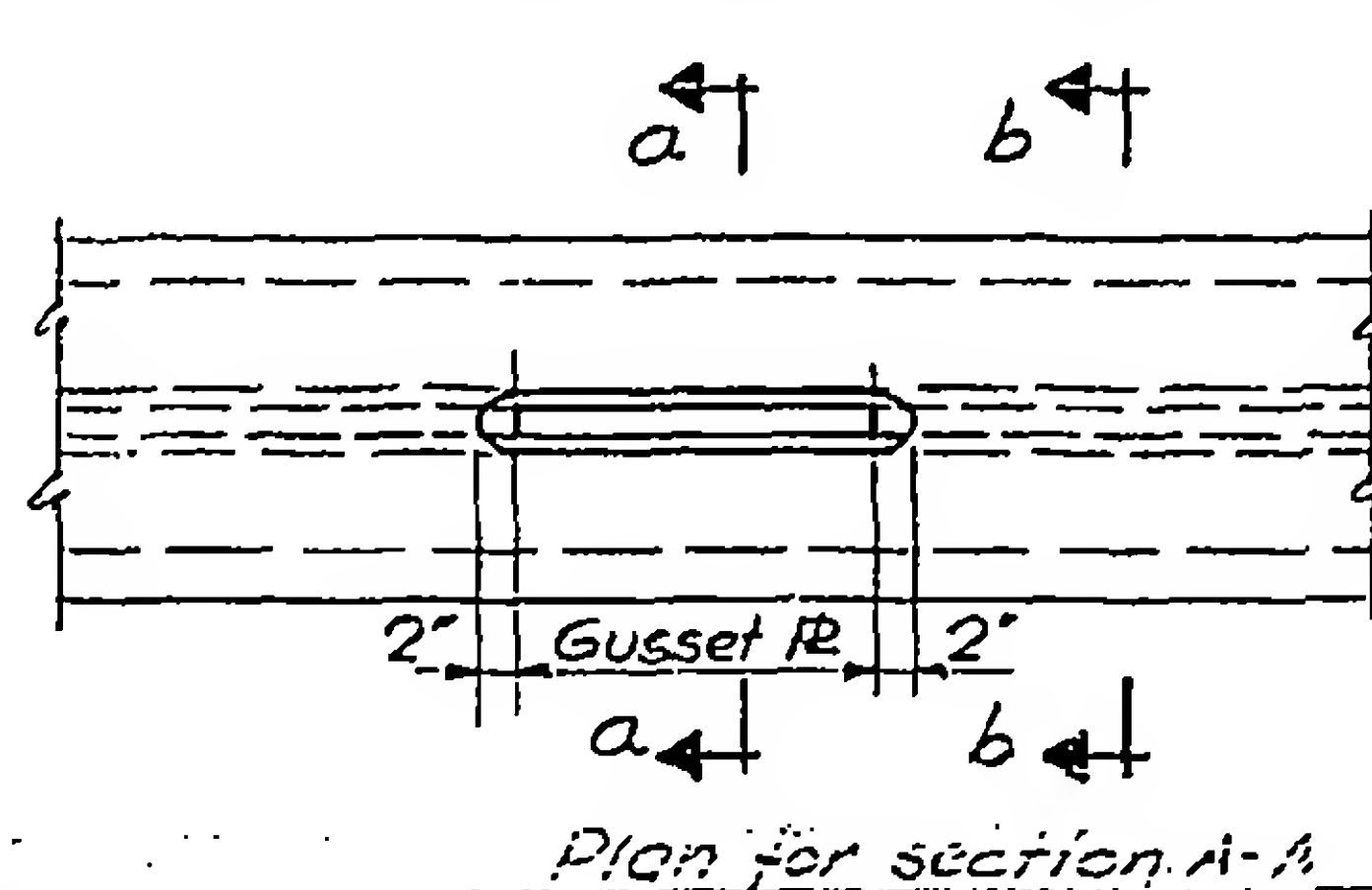
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TITLE FLOOR TRUSS SECTIONS A-A, B-B, C-C, D-D, E-E

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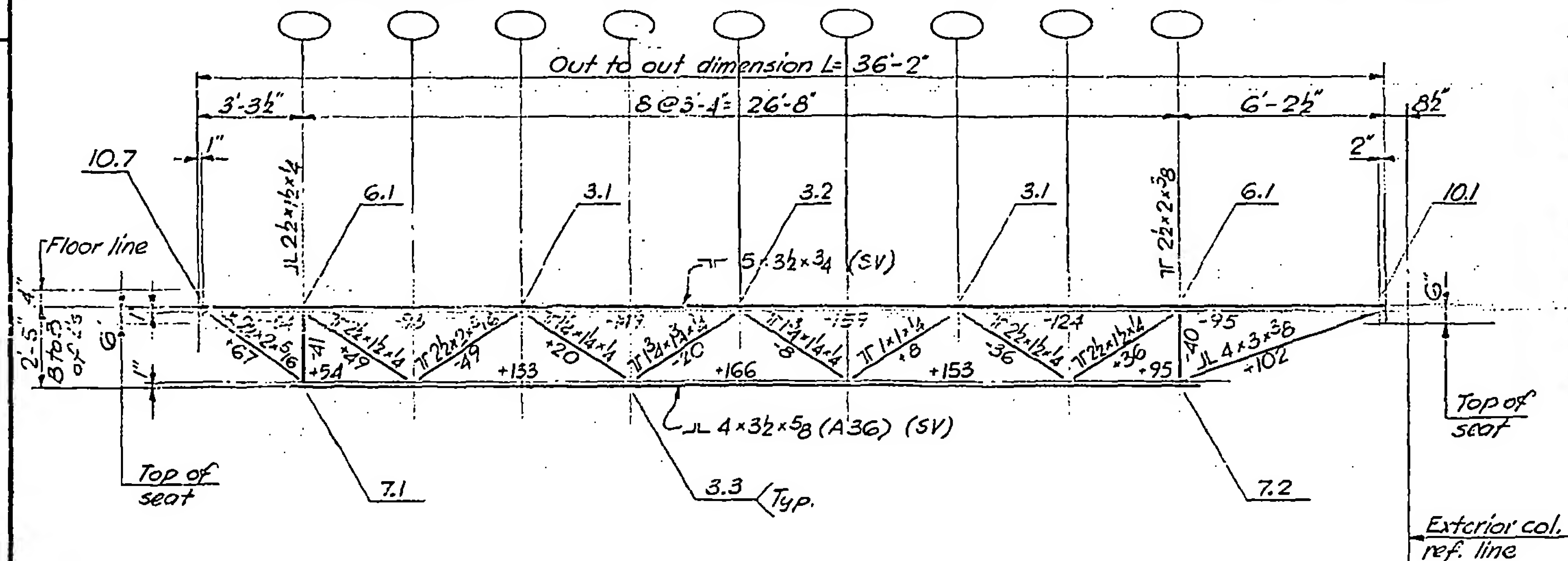
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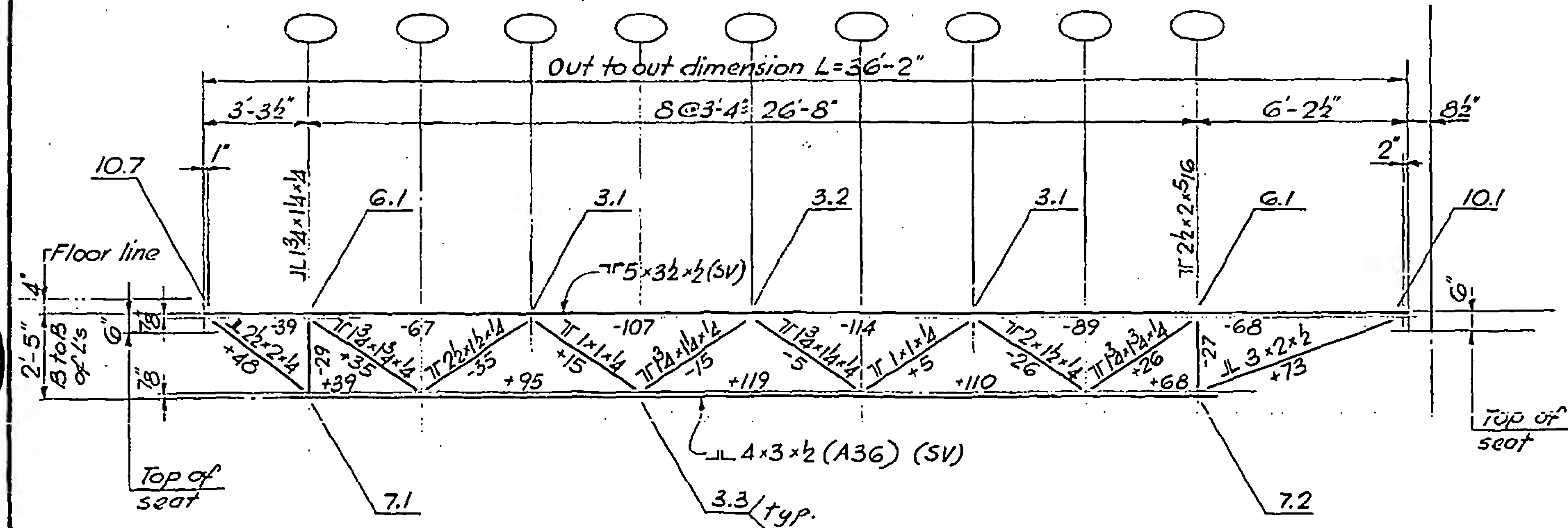
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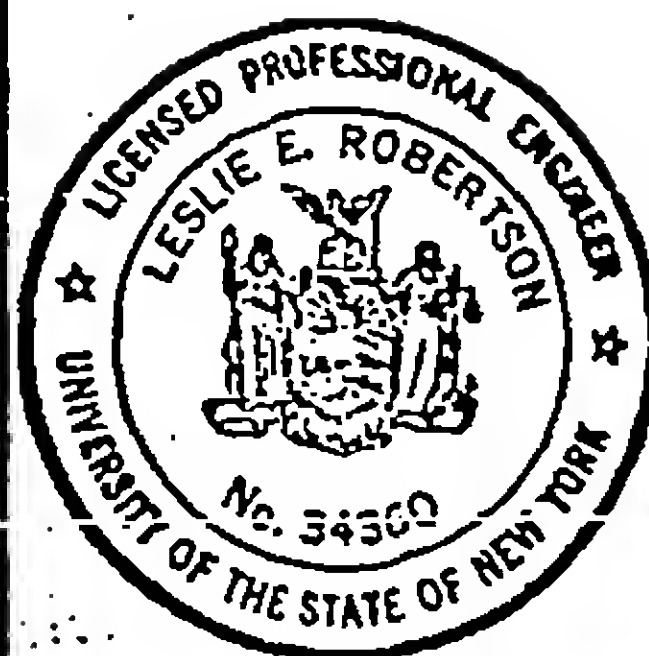
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Elevation 29T7



Elevation 29T8



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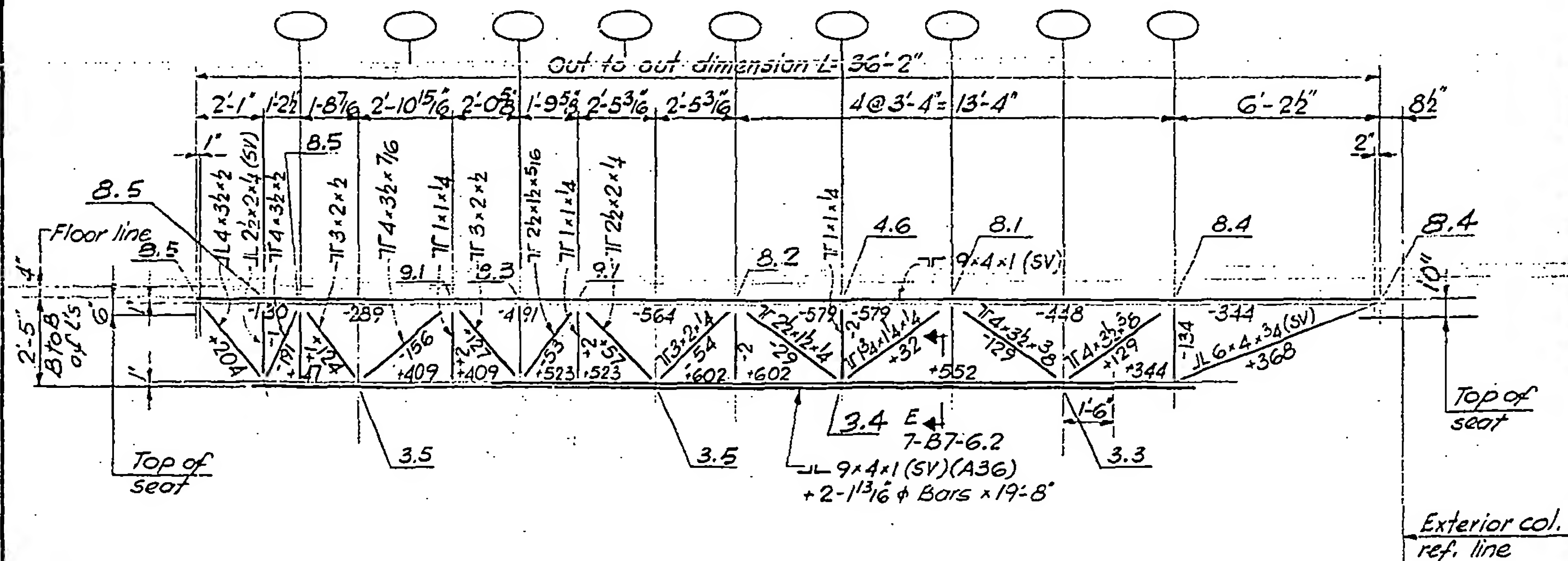
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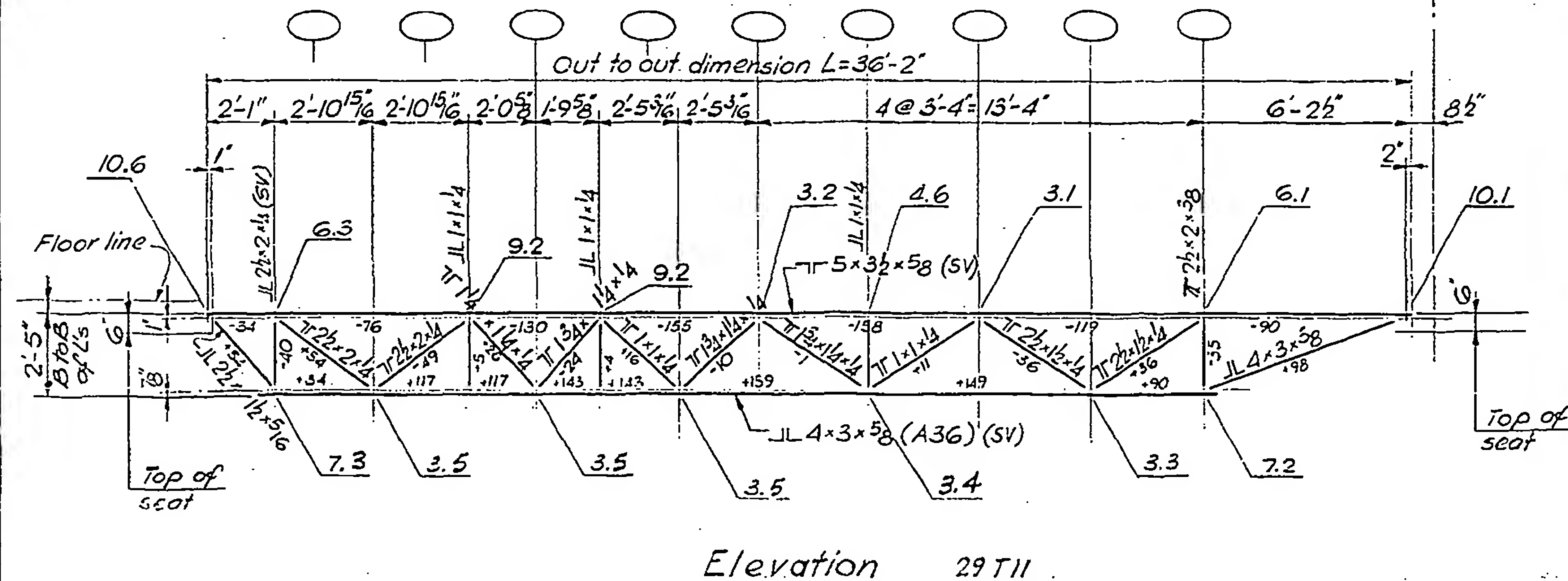
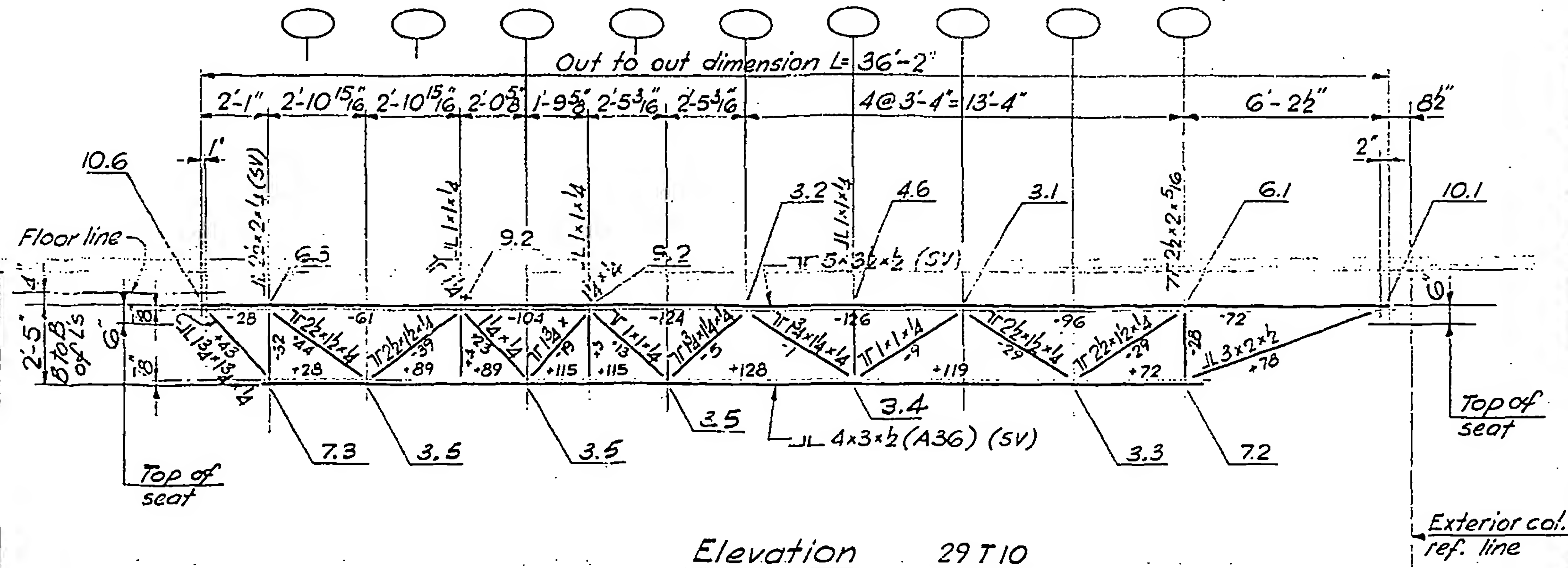
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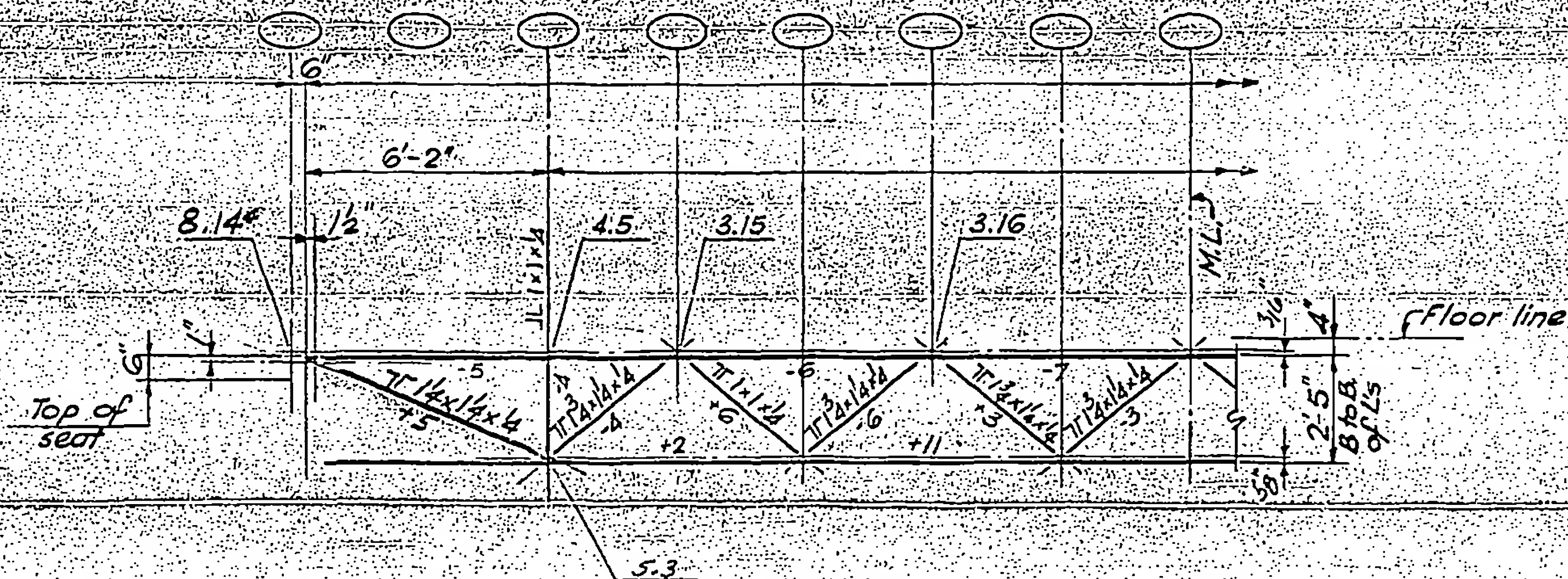
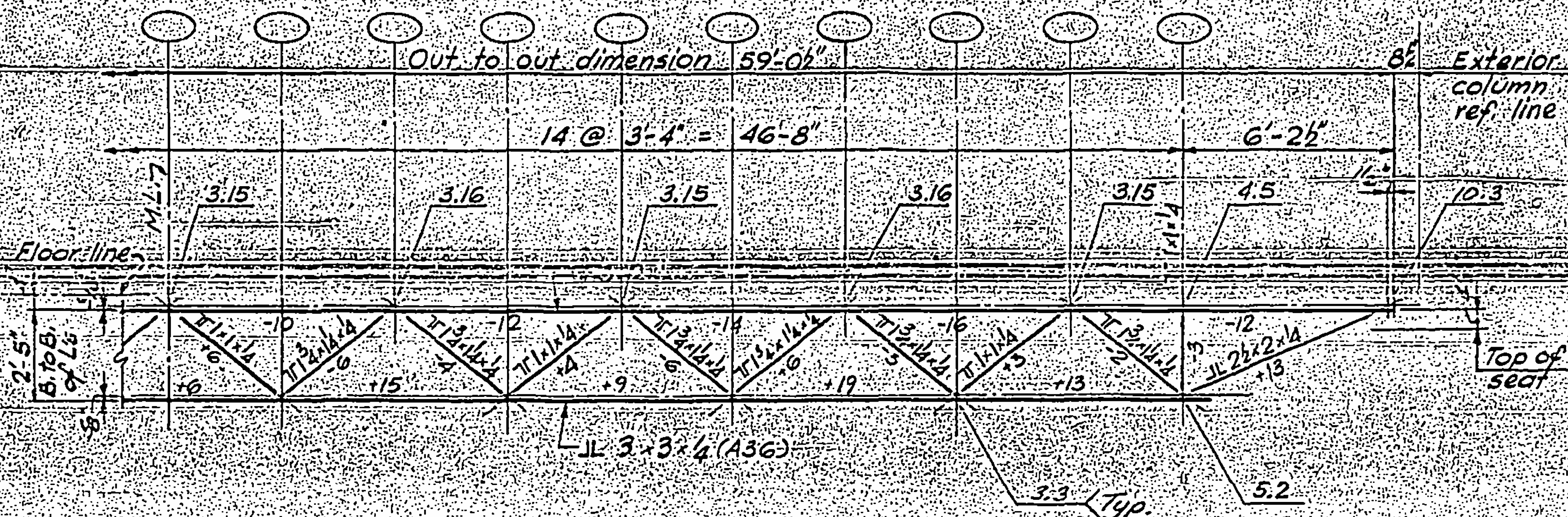
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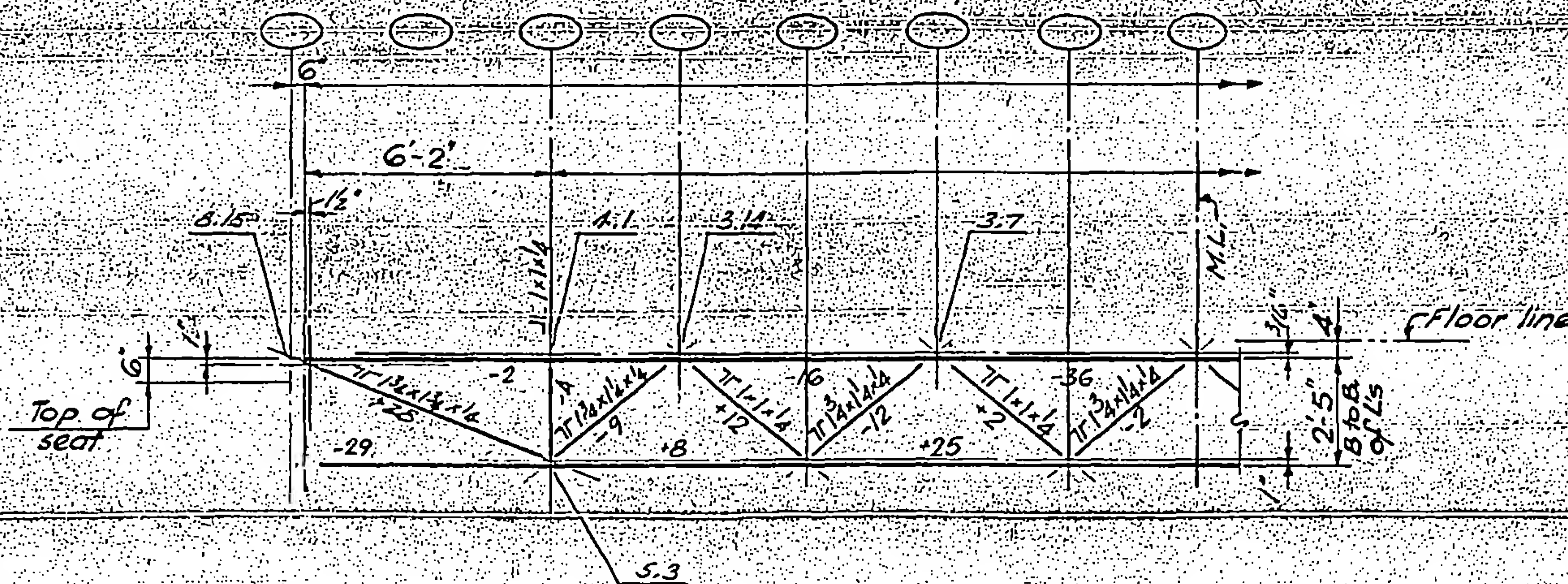
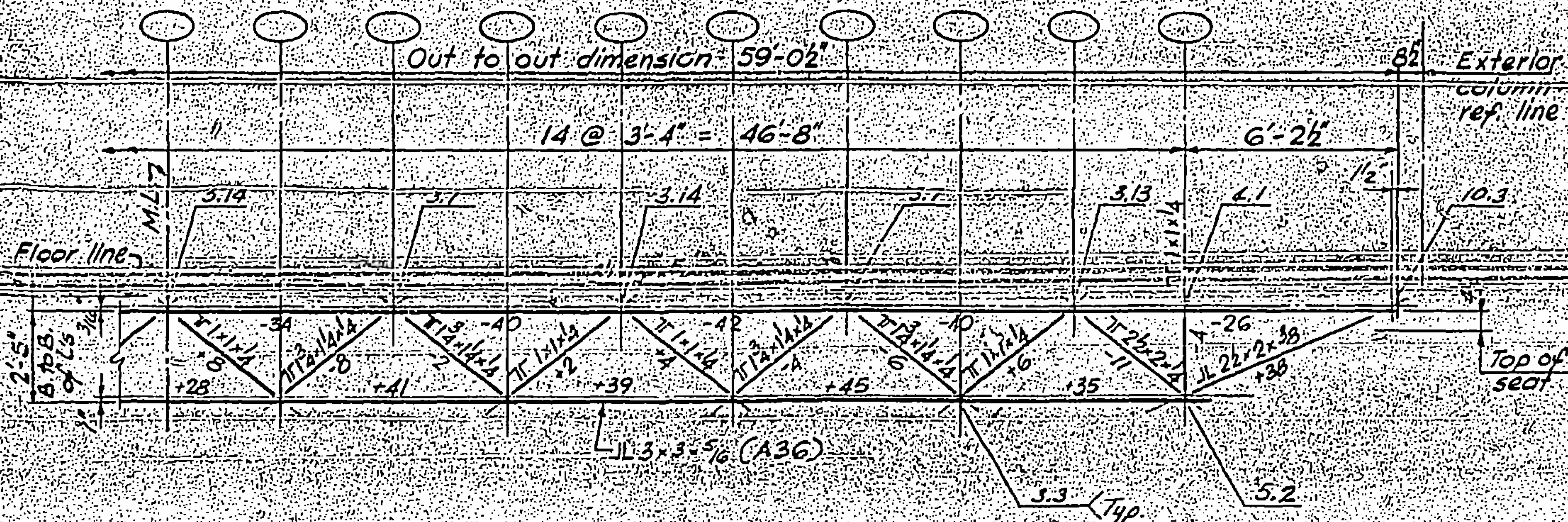
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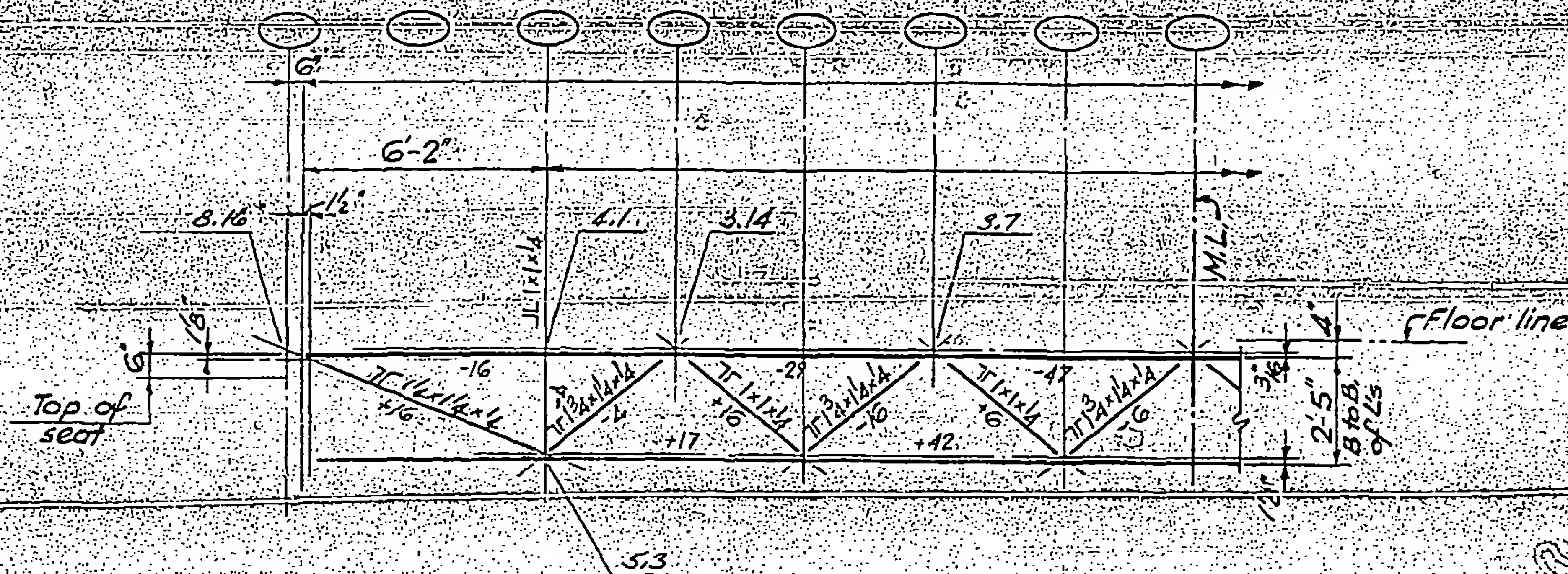
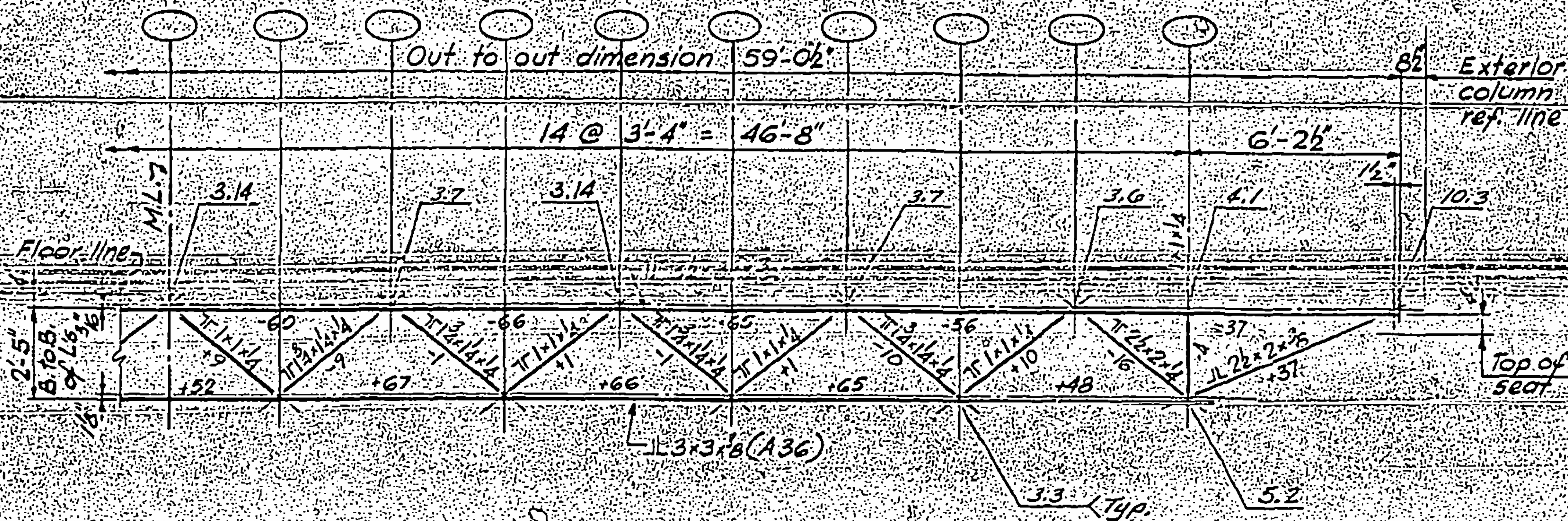
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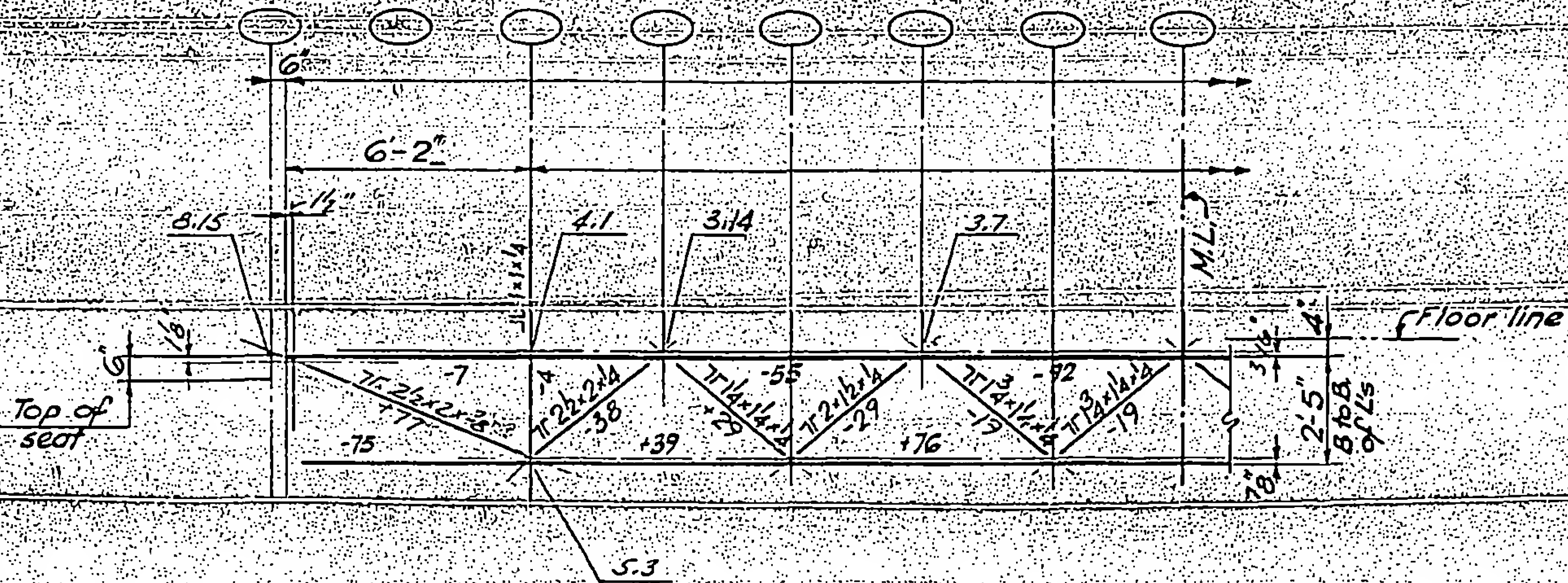
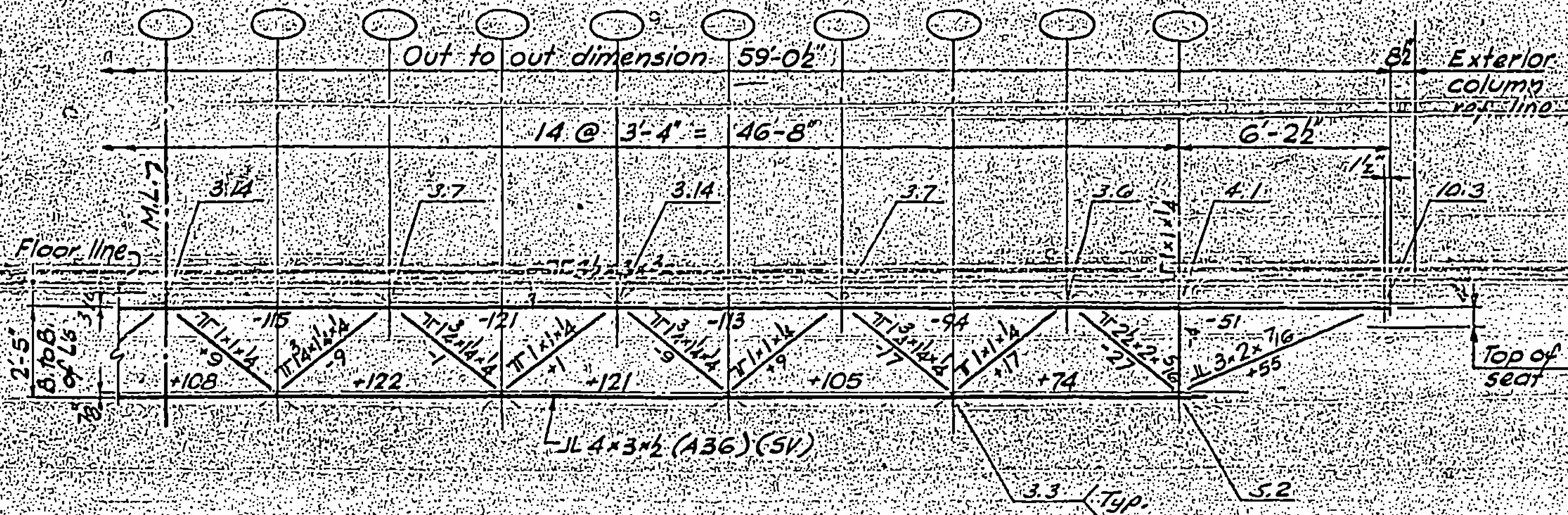
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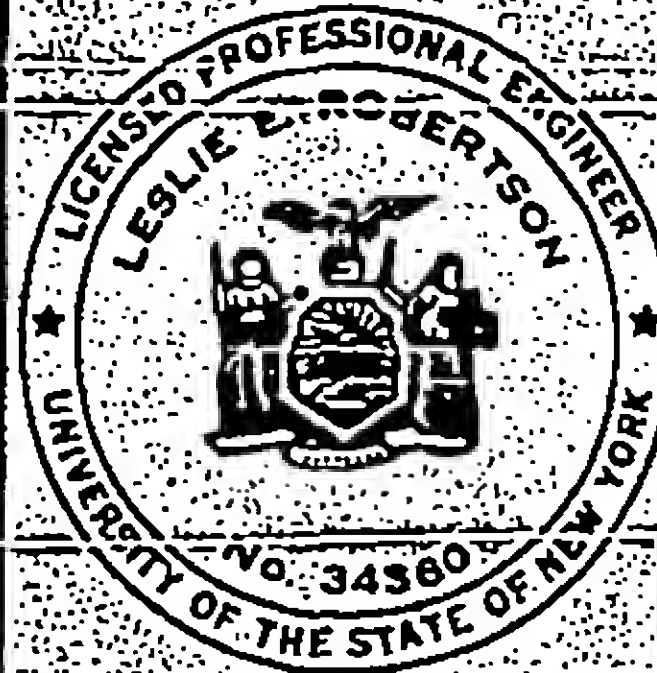
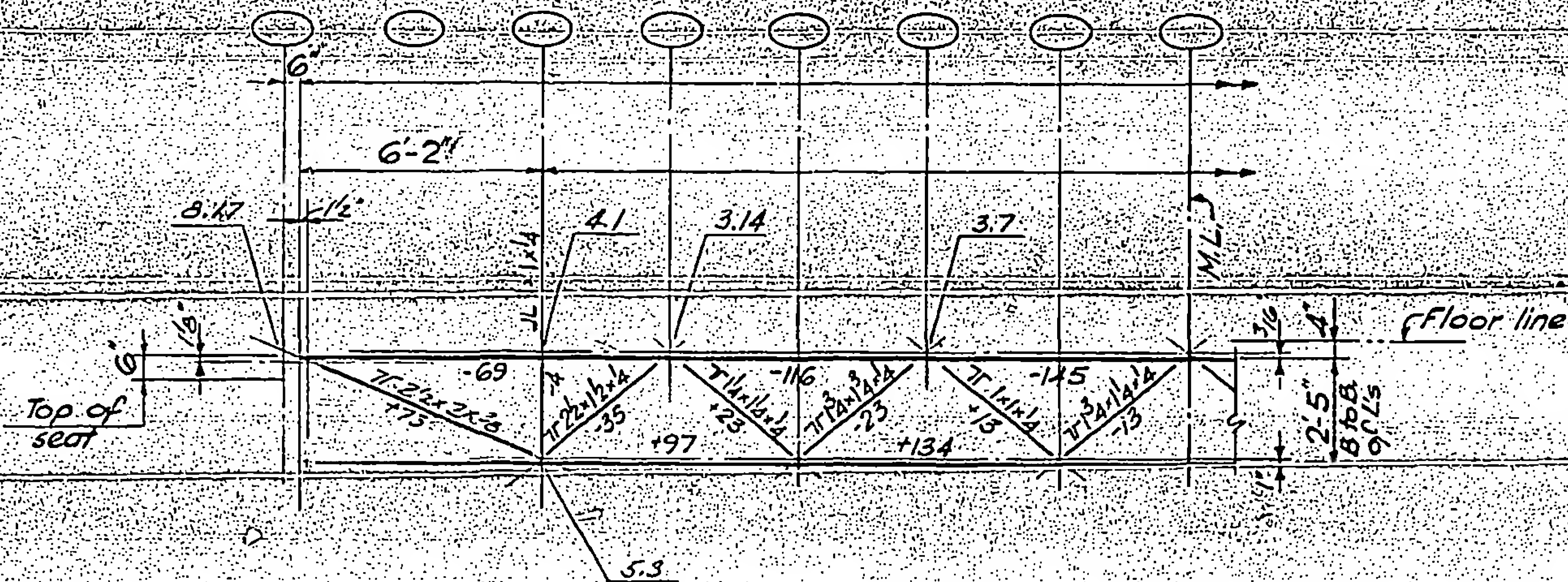
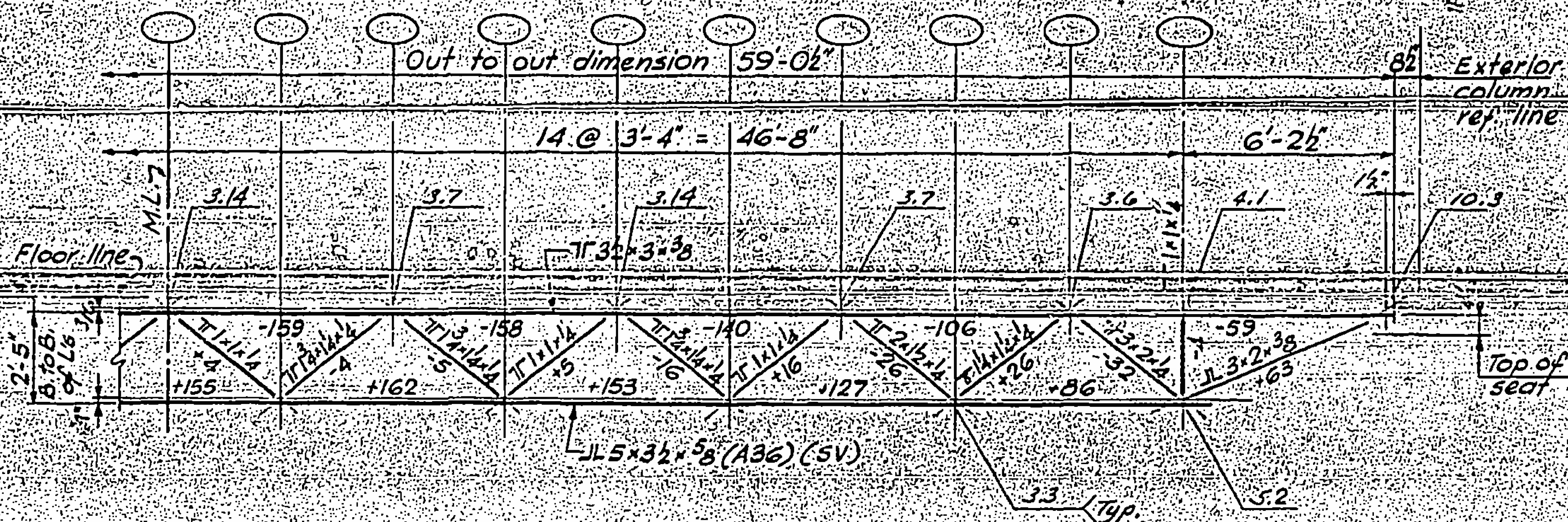
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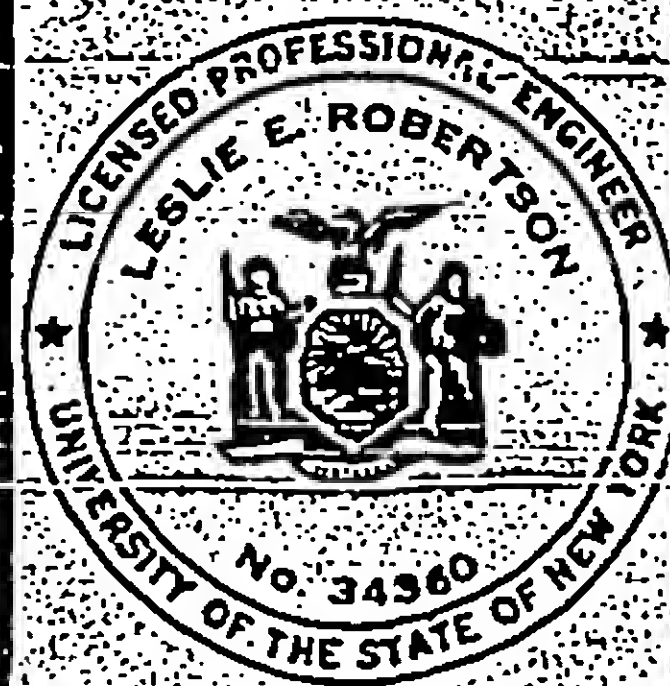
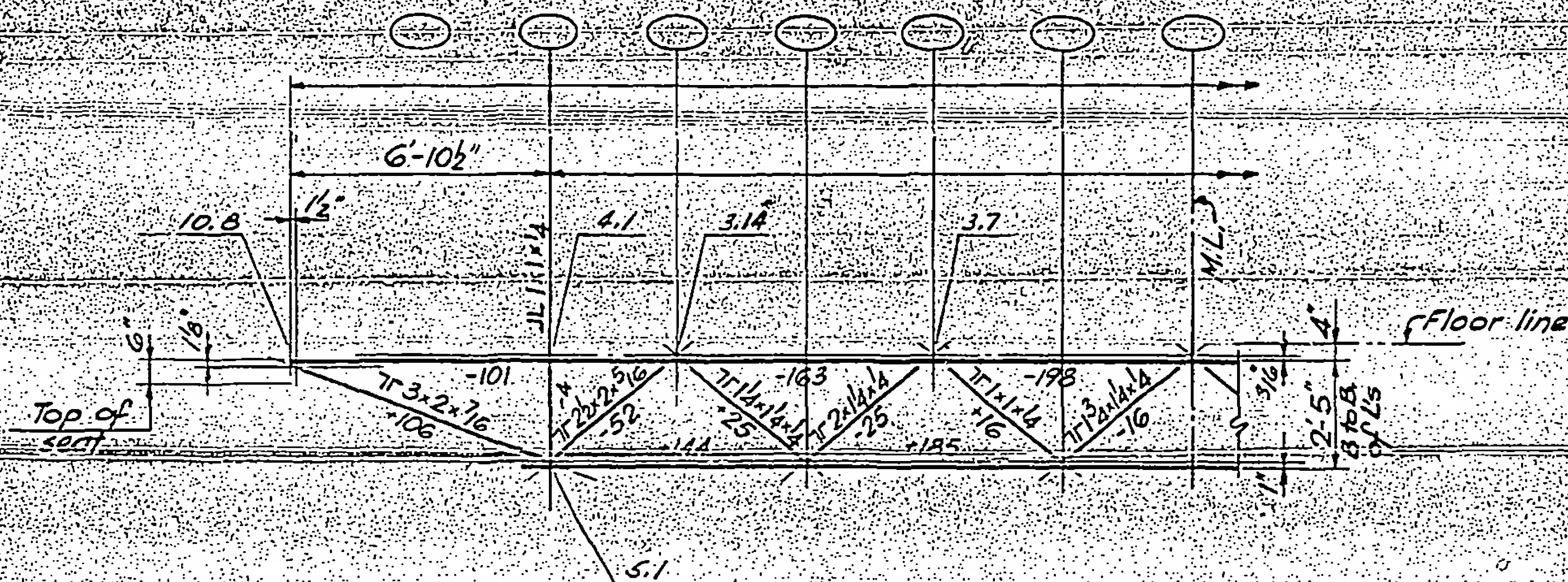
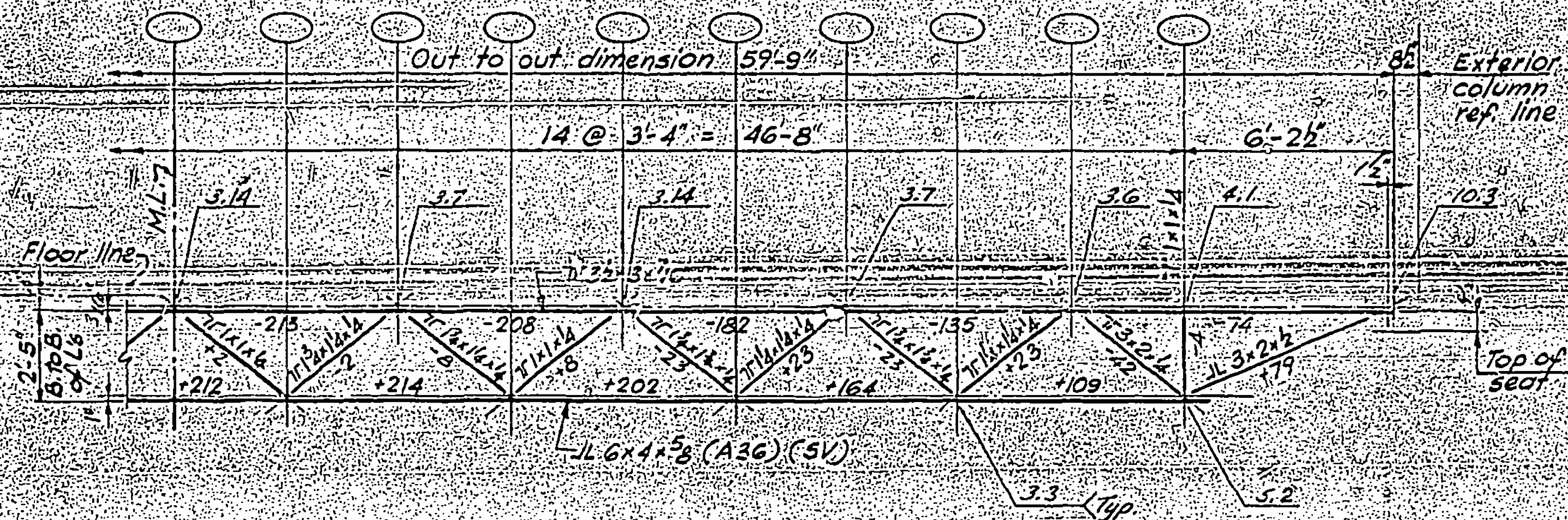
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TITLE FLOOR TRUSS 29 T/17

DATE 3-19-69

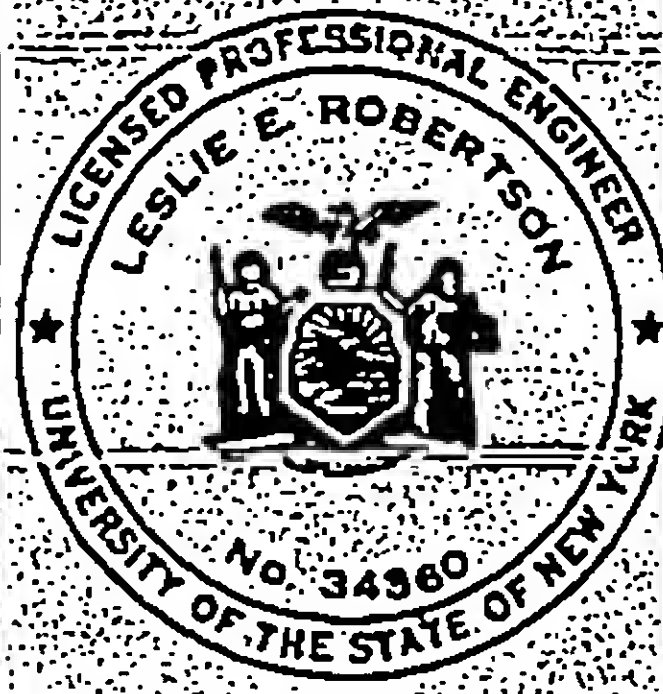
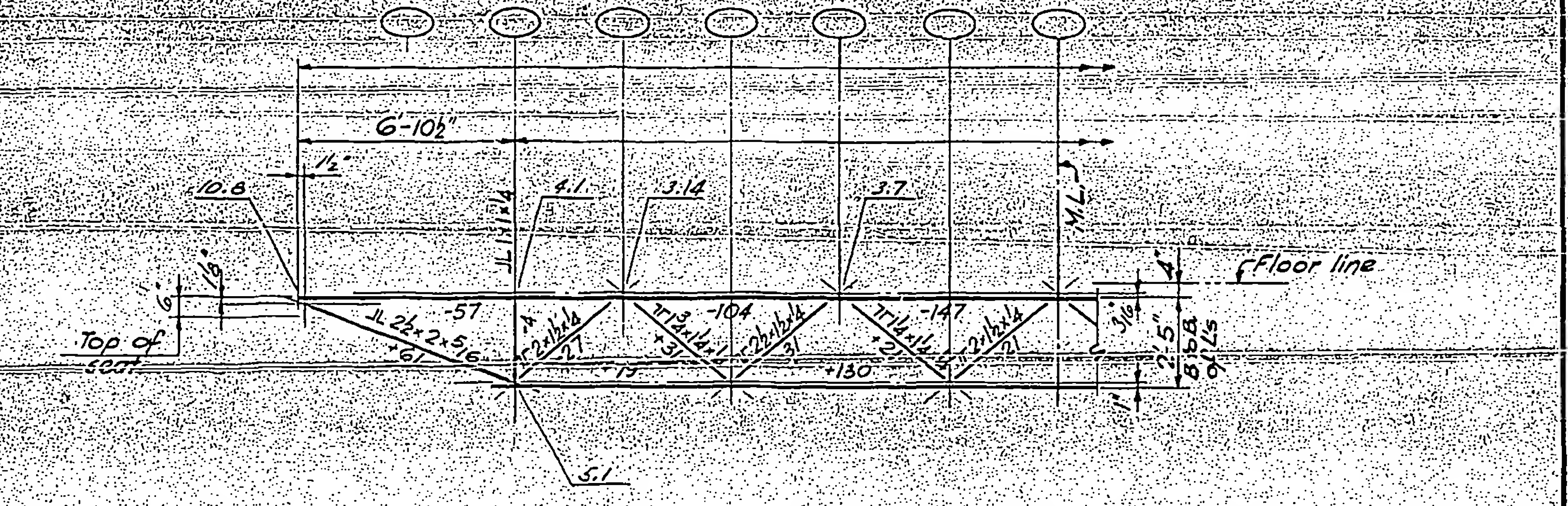
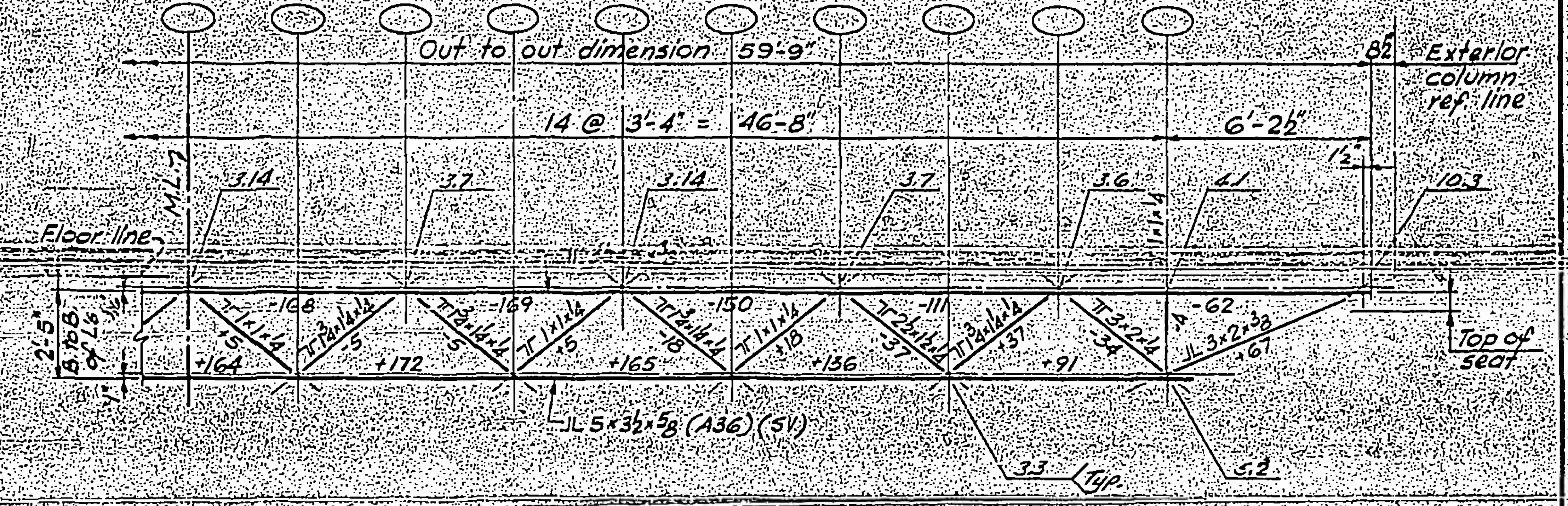
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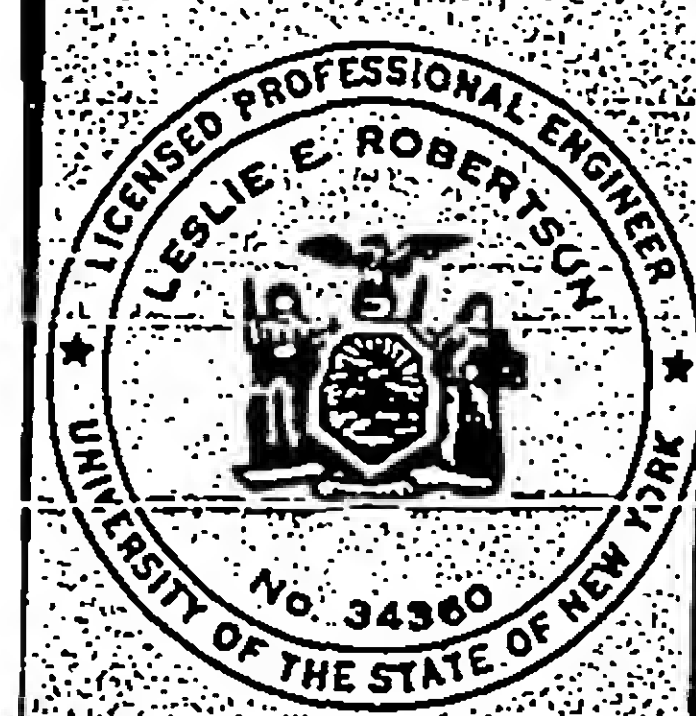
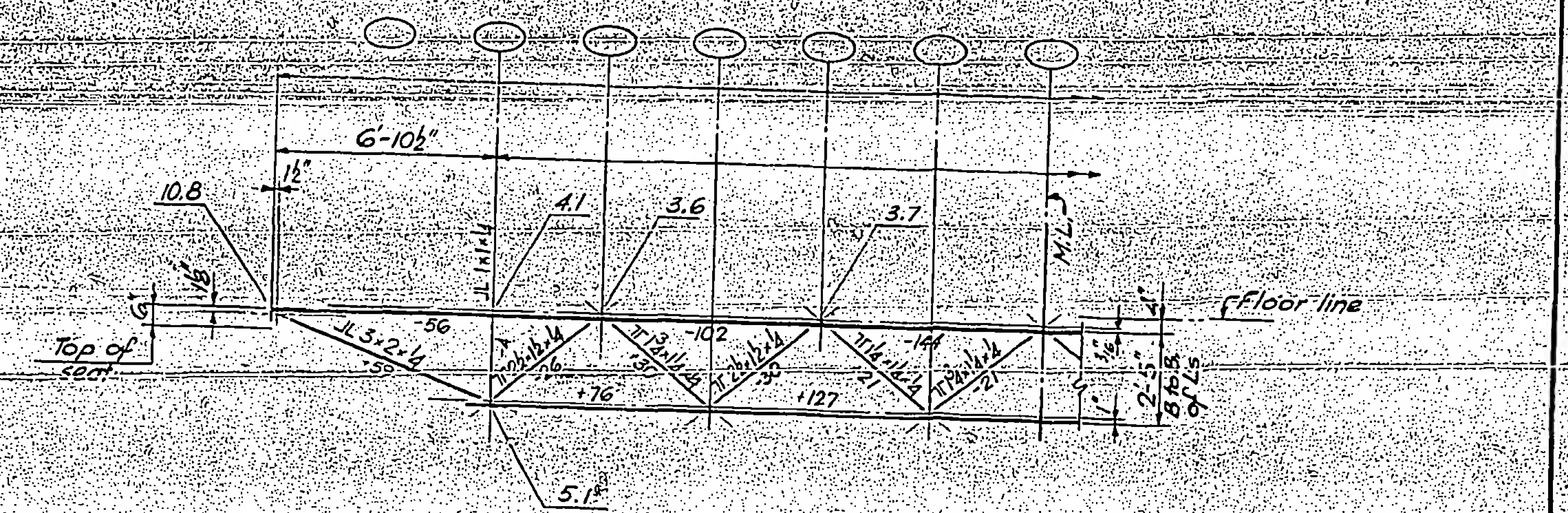
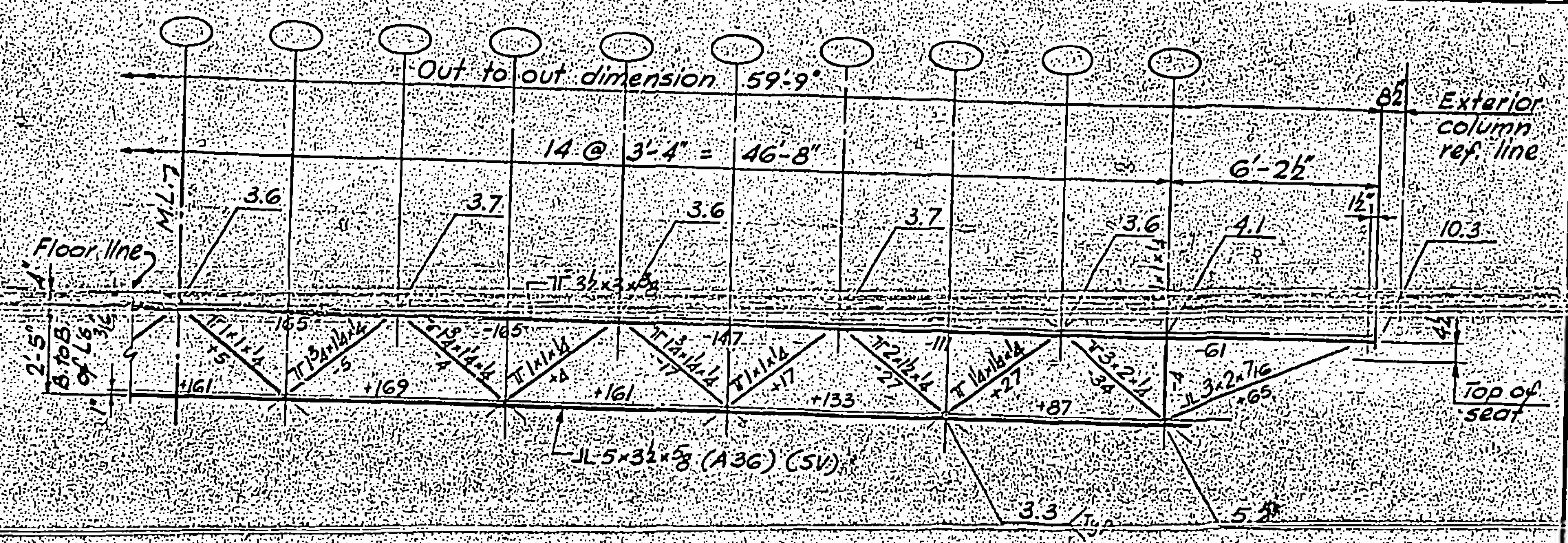
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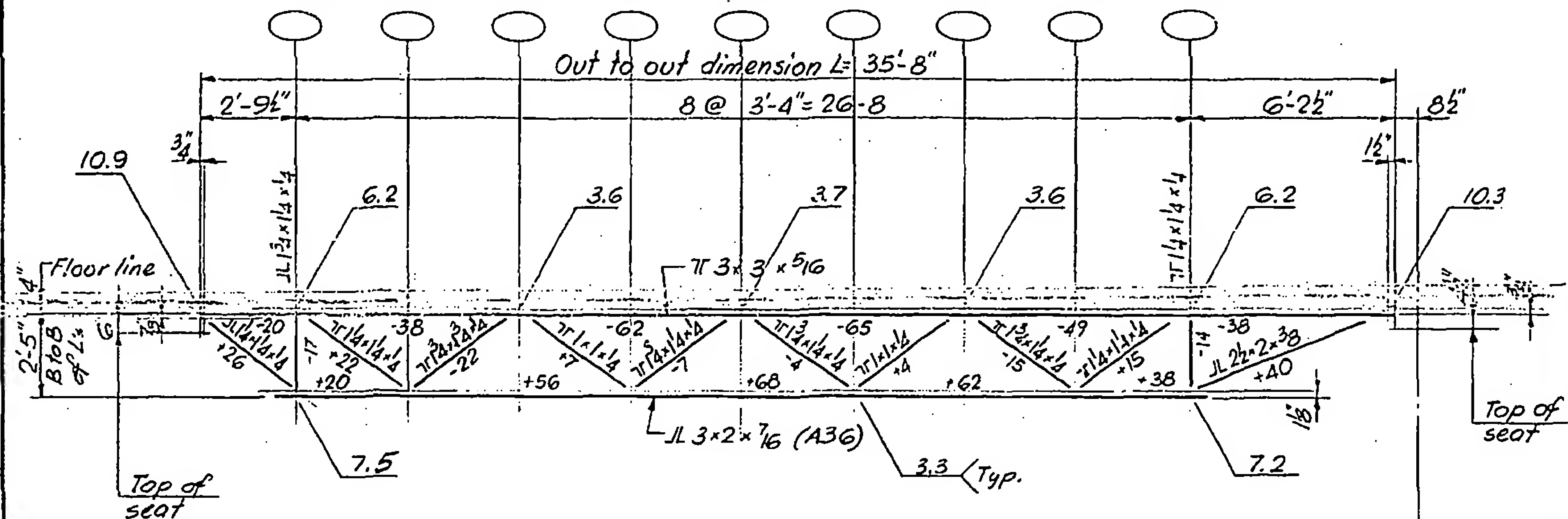
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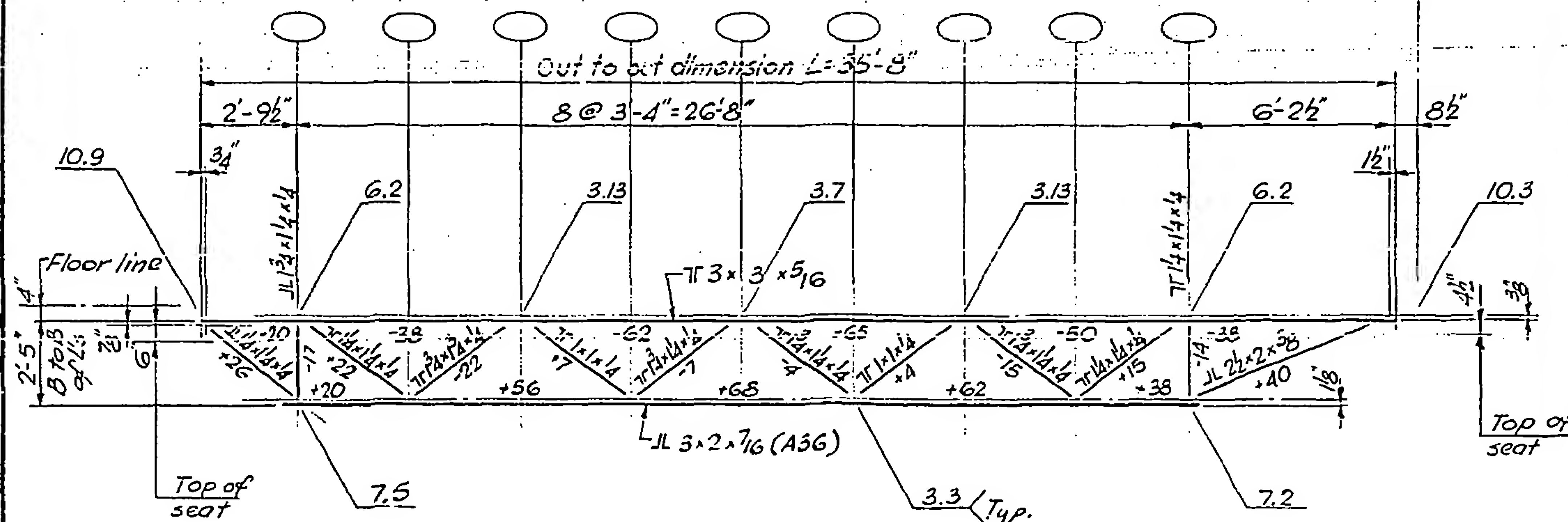
TITLE	FLOOR TRUSS	29 T21 &	29 T22
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DATE 3-19-69

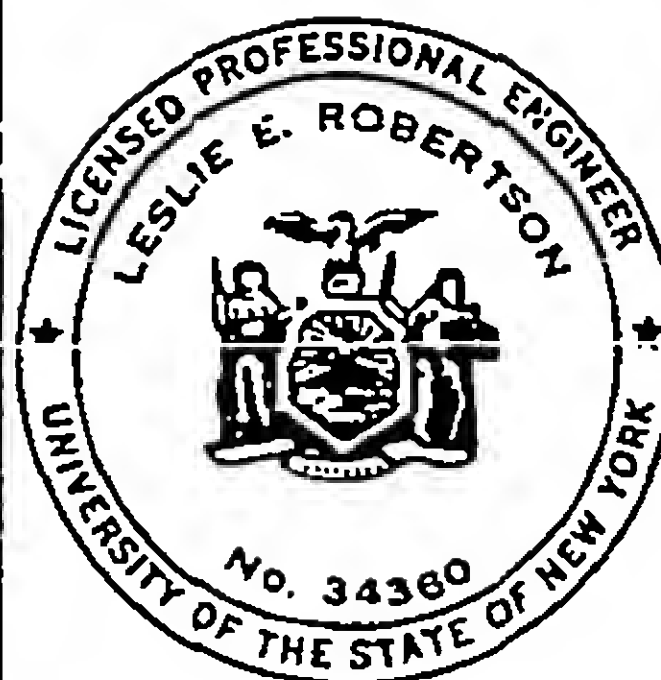
REVISIONS



Elevation 29 T 21



Elevation 29 T 22.



DESIGNED
K. Hwang
DRAWN
J. Gricius

REVIEWED
W. Brewer

7-B7-19

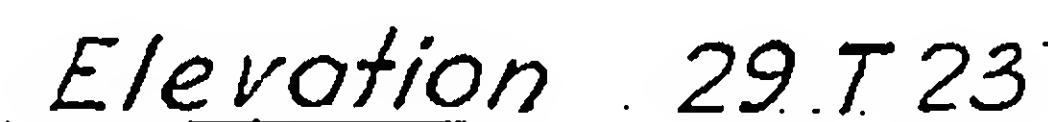
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TITLE FLOOR TRUSS 29T23 & 29T24

DATE 3-19-69

REVISIONS

7-14-69



DESIGNED
C. Hwang

DRAWN
J. Gricius

REVIEWED D. Brewer

7-B7-20

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

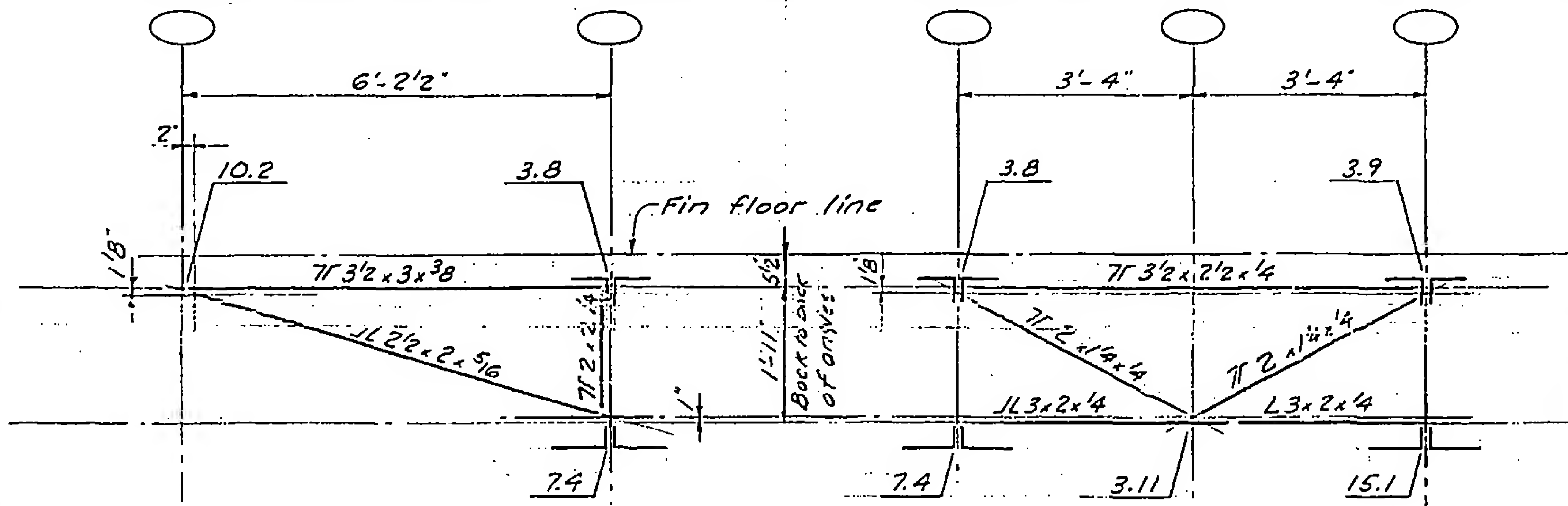
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PROJECT THE WORLD TRADE CENTER

TITLE FLOOR TRUSS B1, B2, B3 & B4

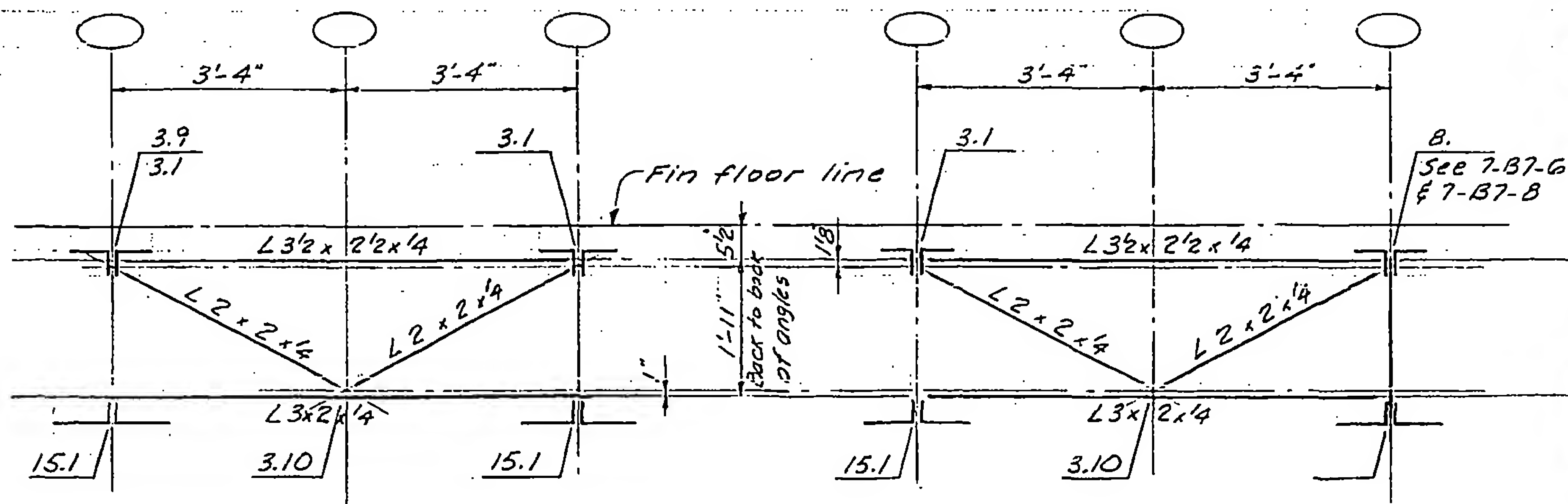
DATE 3-19-69

REVISIONS



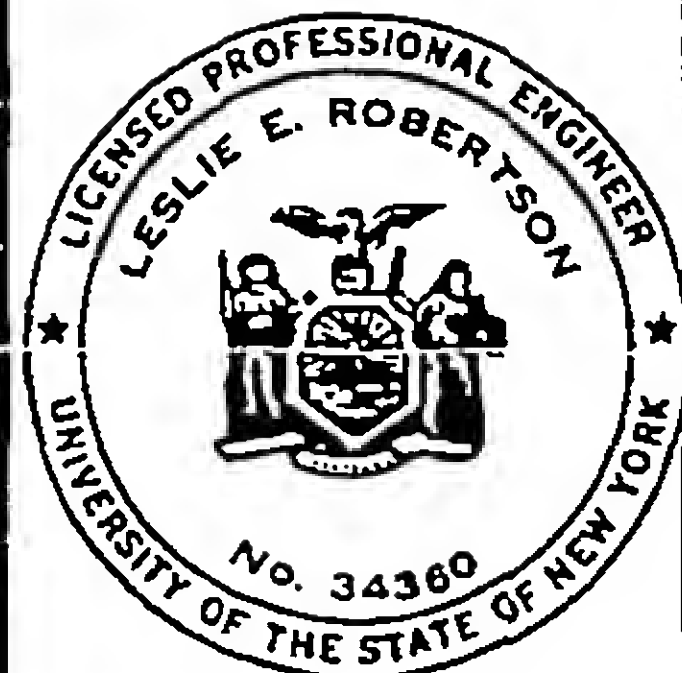
B1

B2



B3

B4



DESIGNED K. G. Wang

DRAWN A.L. FRANQUI

REVIEWED W. Brewer

7-B7-21

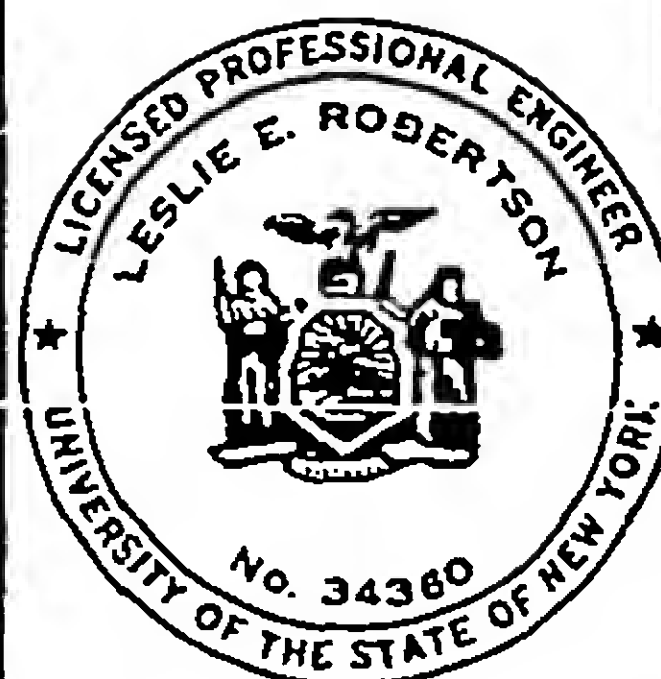
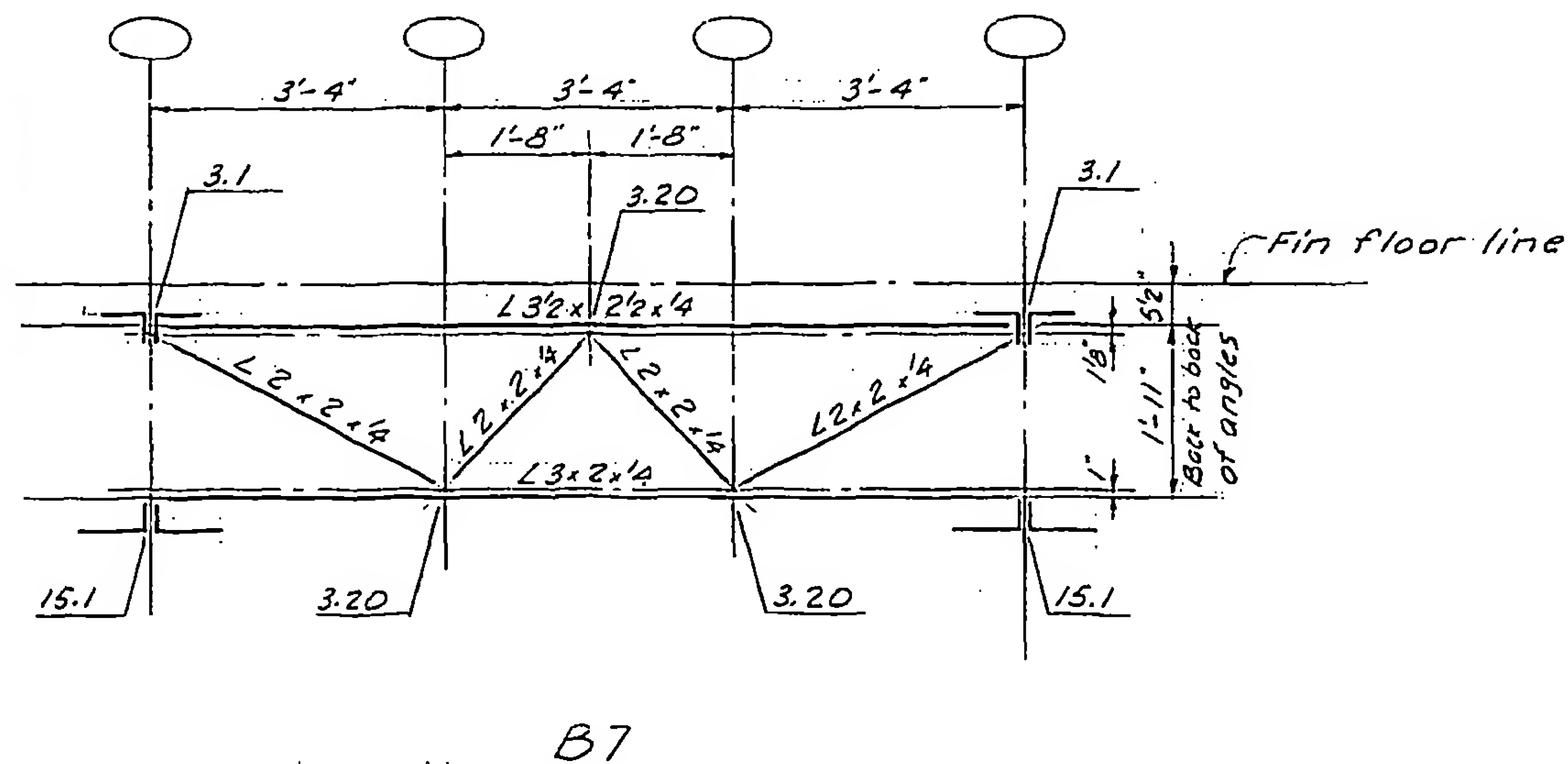
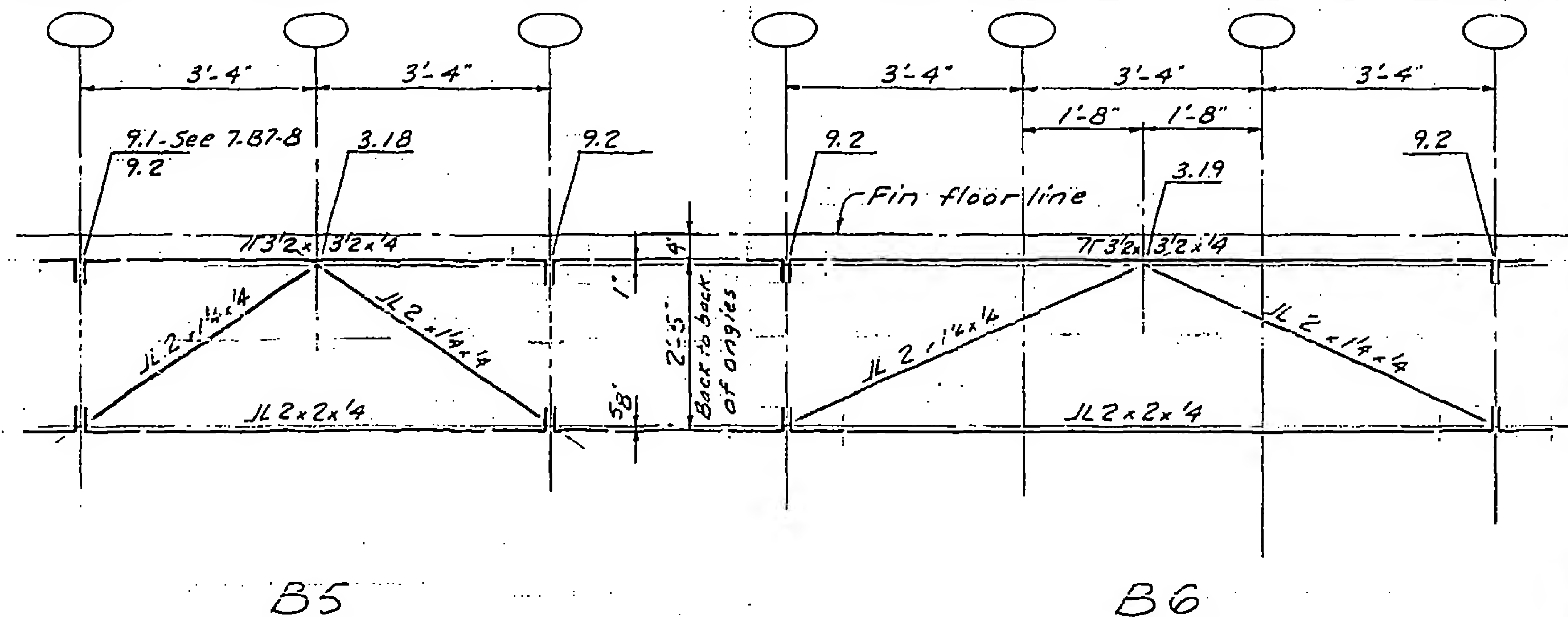
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PROJECT *THE WORLD TRADE CENTER*

TITLE FLOOR TRUSS B5, B6 & B7

DATE 3-19-69

REVISIONS



DESIGNED
K. Hwang

DRAWN
A. L. FRANQUI

REVIEWED
W. B. Newer

7-B7-22

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

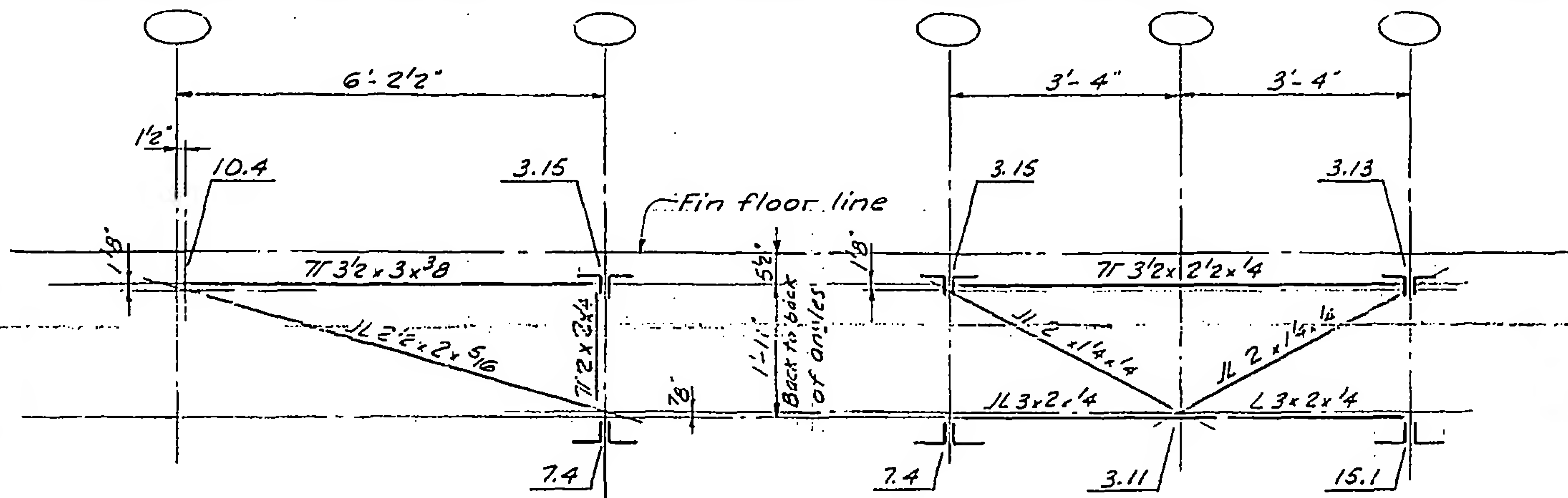
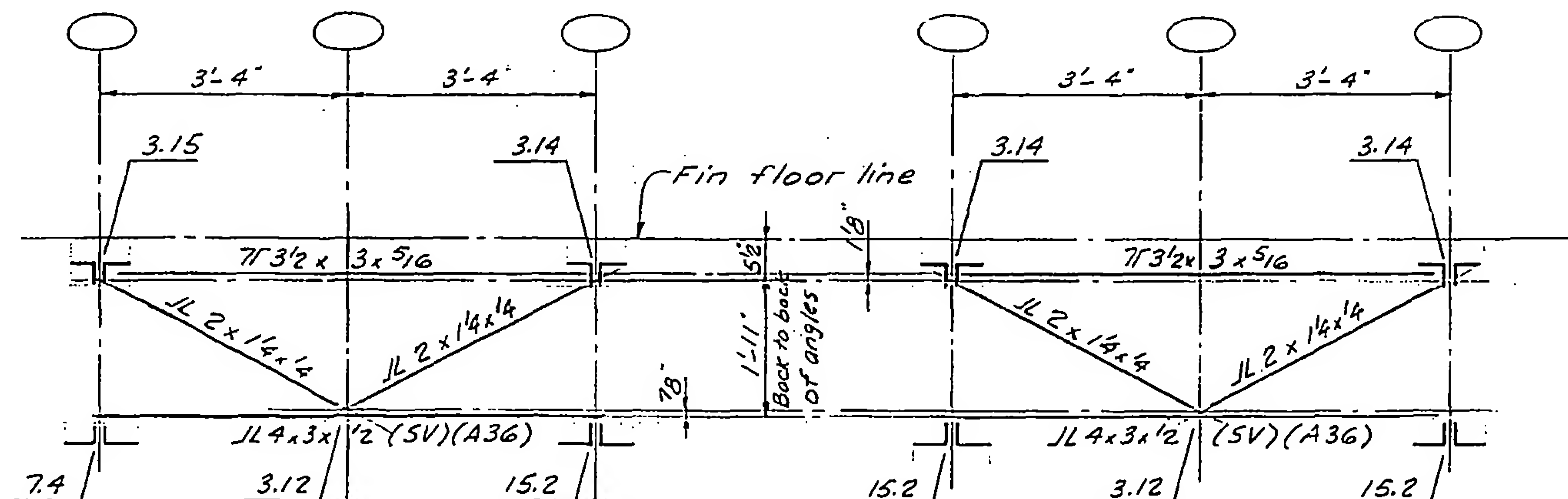
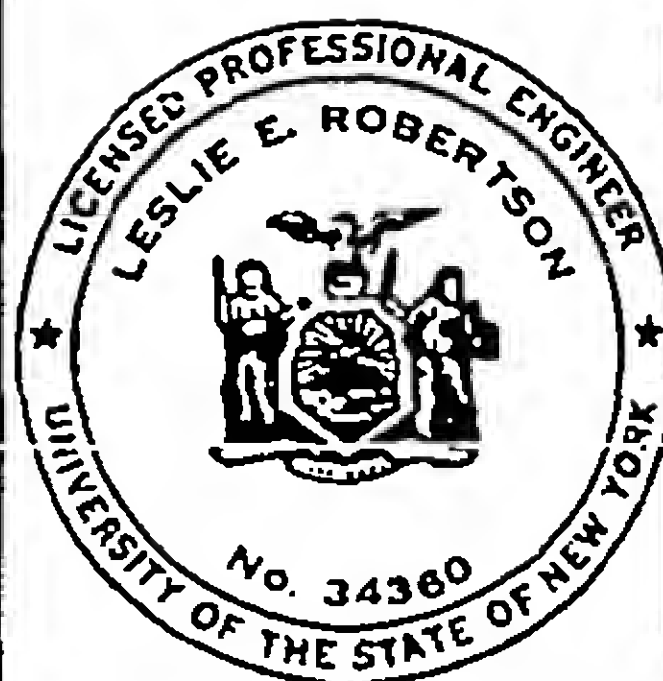
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PROJECT THE WORLD TRADE CENTER

TITLE FLOOR TRUSS B10, B11, B12 & B13

DATE 3-19-69

REVISIONS

B10B11B12B13DESIGNED
K. HwangDRAWN
A.L. FRANQUIREVIEWED
W. B. Brewer

7-B7-23

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

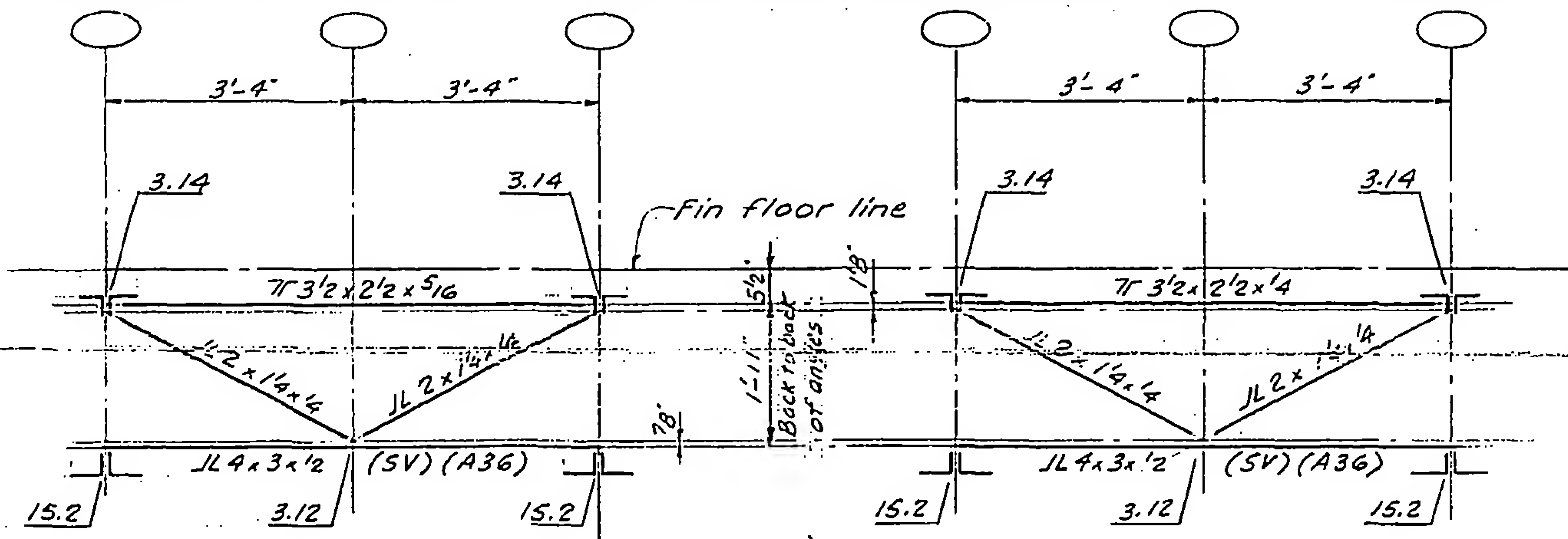
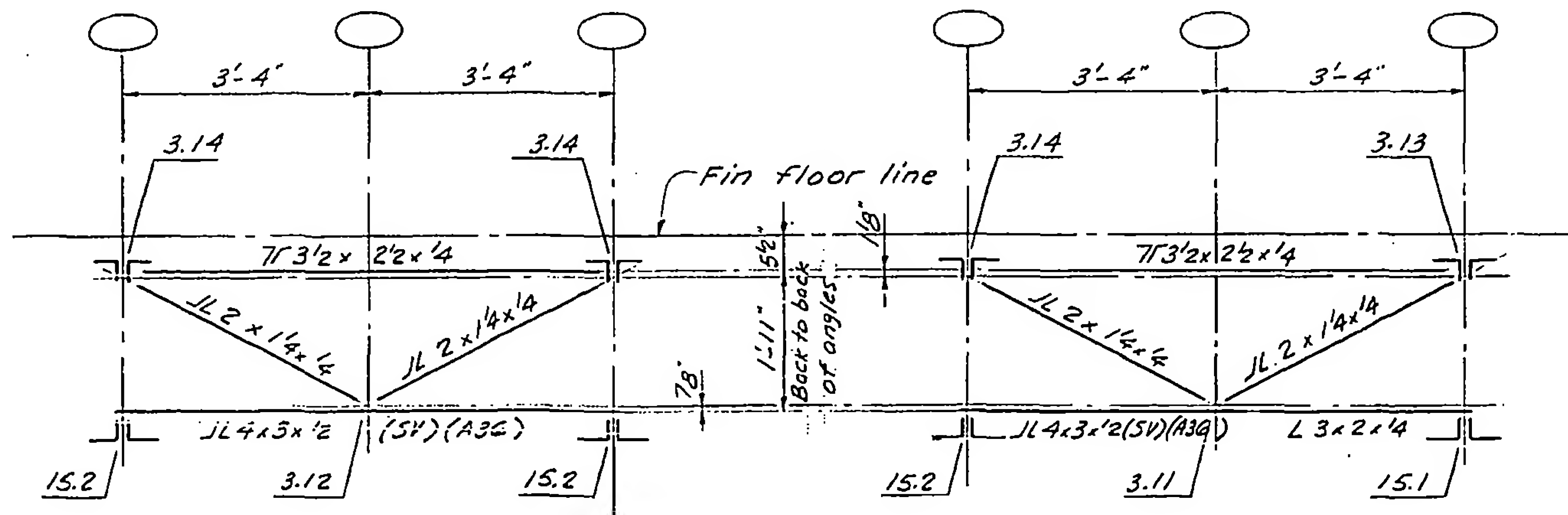
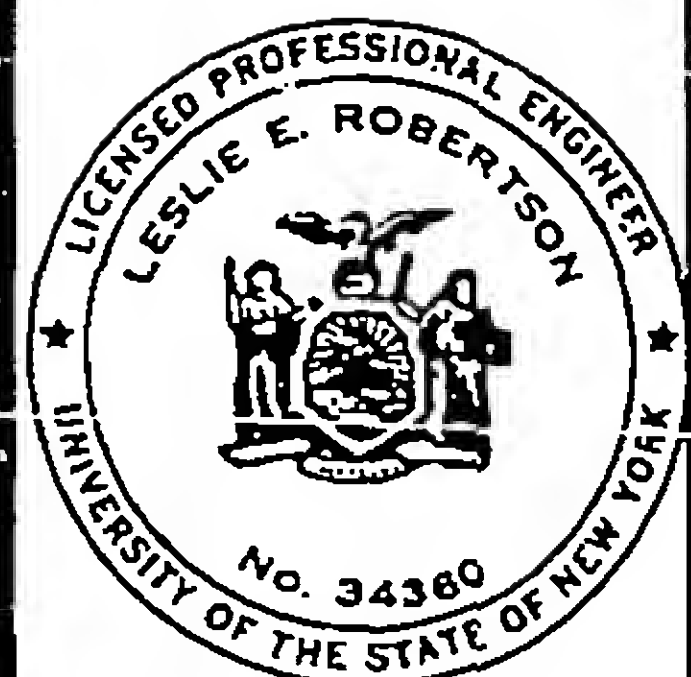
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PROJECT THE WORLD TRADE CENTER

TITLE FLOOR TRUSS B14, B15, B16 & B17

DATE 3-19-69

REVISIONS

B14B15B16B17DESIGNED
K. HwangDRAWN
A. L. FRANQUIREVIEWED
W. Brewer

7-B7-24

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

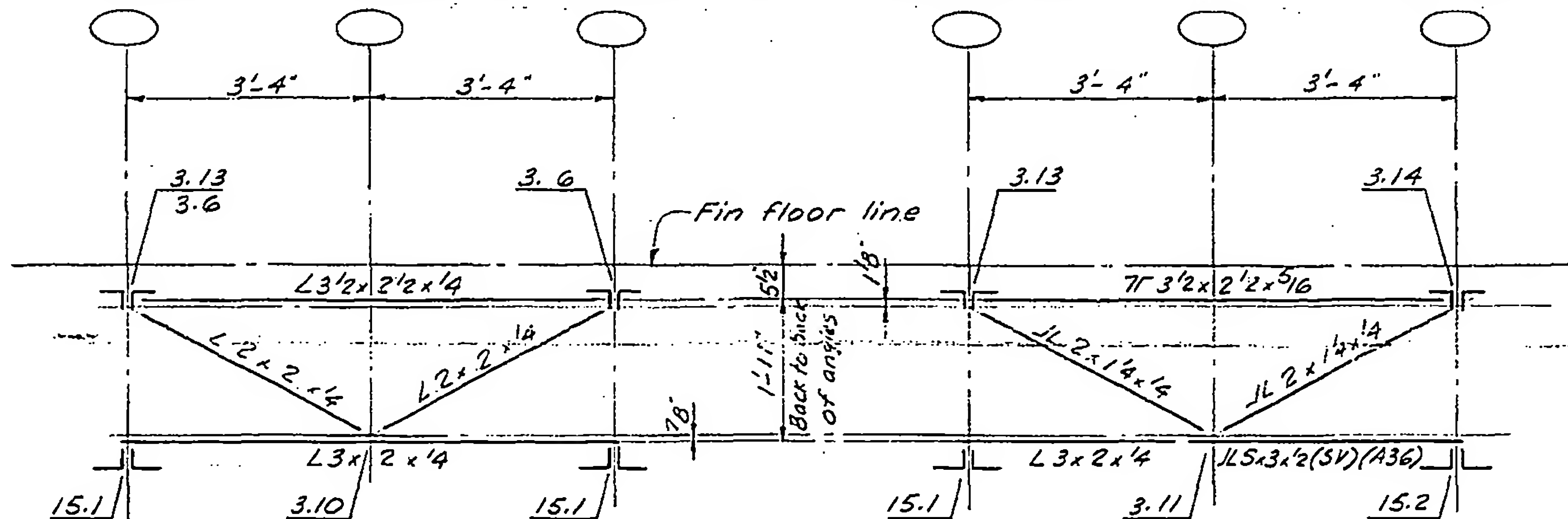
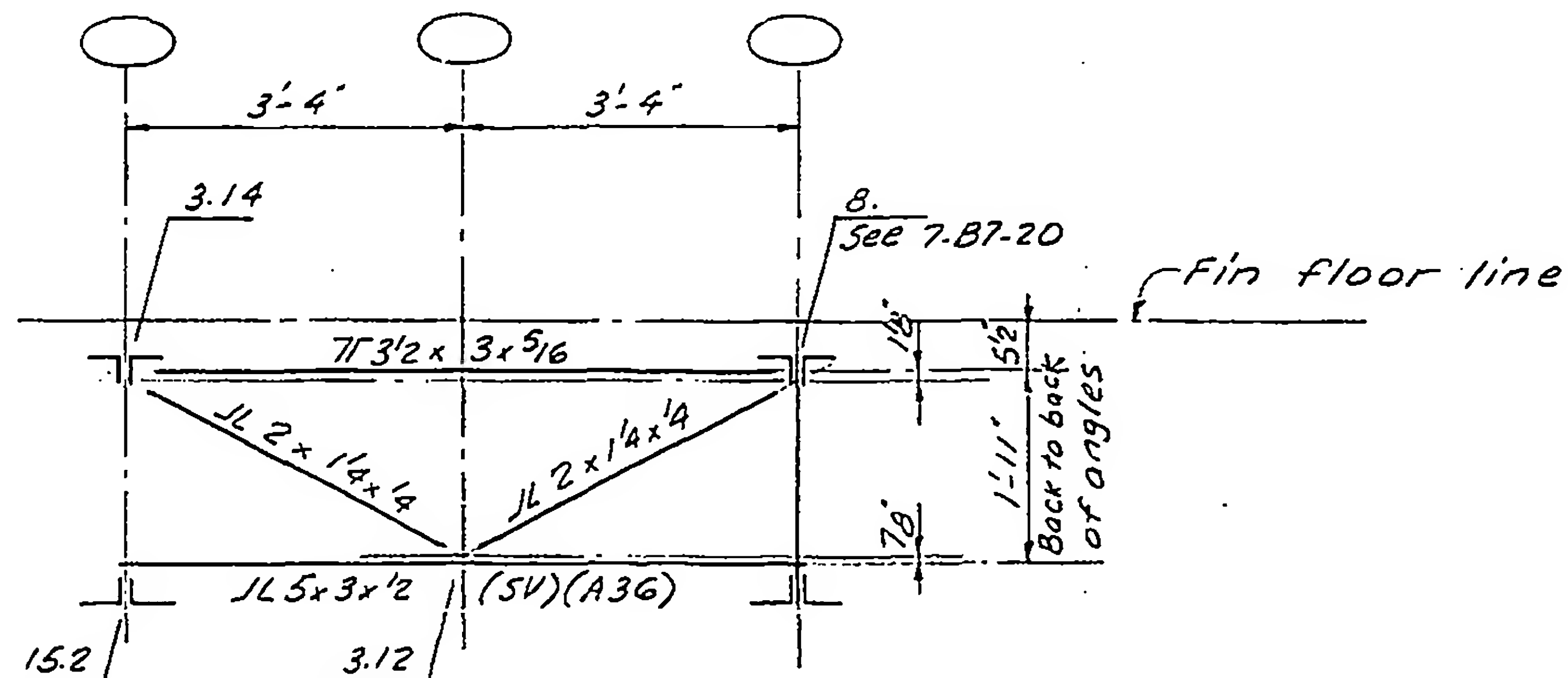
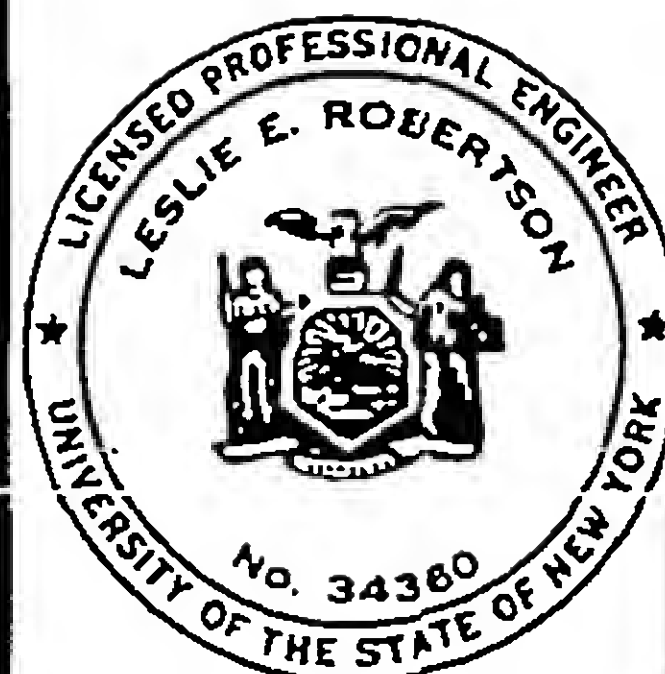
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PROJECT THE WORLD TRADE CENTER

TITLE FLOOR TRUSS B18, B19 & B20

DATE 3-19-69

REVISIONS

B18B19B20DESIGNED
K. Hwang
DRAWN
A.L. FRANQUIREVIEWED
W. Brewer

7-B7-25

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

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PROJECT THE WORLD TRADE CENTER

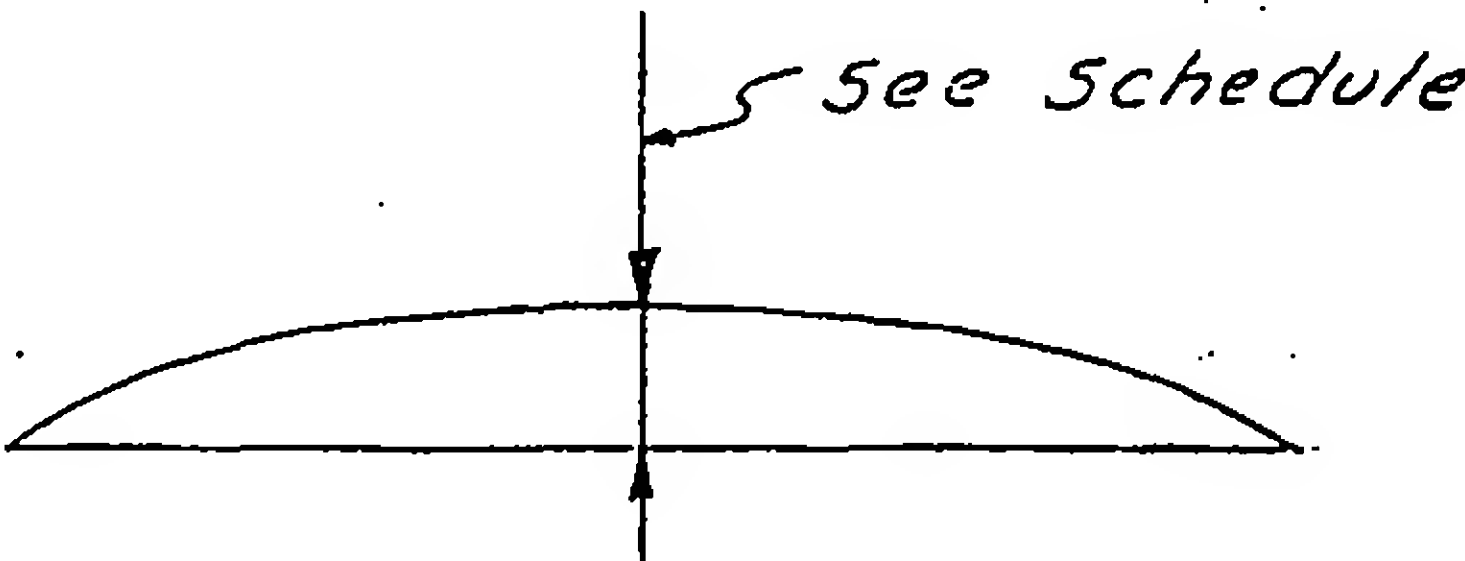
TITLE FLOOR TRUSS CAMBER DIAGRAMS

DATE 3-19-69

REVISIONS

4-21-69

5-13-69



Camber Schedule

Truss No.	Camber at Mid span (in)
29T1	1 7/8
29T2	1 5/16
29T3	2 1/16
29T4	2 5/8
29T5	1
29T6	1 1/16
29T7	1 3/16
29T8	5/8
29T9	1 1/16
29T10	1 3/16
29T11	7/8
29T12	1/2
29T13	1 3/16
29T14	1
29T15	1 1/2
29T16	1 11/16
29T17	2 1/16
29T18	2
29T19	2 5/8
29T20	2 1/16
29T21	1/2
29T22	1/2
29T23	5/8
29T24	1 1/16



DESIGNED

DRAWN

A.L. FRANQUI

REVIEWED

7-B7-26

4430-1001-1077

WTH-1061-LEA